**JEDI Financial Partnership Evaluation for the Nebraska Department of Natural Resources**

**Prepared By Nebraska Recreational Lake Trust**

**May 31, 2024**

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## I. Project Definition/Executive Summary

Following the COVID-19 pandemic and the trend toward a remote workforce around the country, people are rethinking where they want to work, live, and raise a family. As people consider priorities, access to outdoor recreational opportunities will be important in making Nebraska a competitive choice for the future. Water recreation opportunities in our state make Nebraska an even more attractive place to live and raise a family. In turn, the State's water resources provide economic benefits to the people, communities, and businesses of Nebraska by helping to attract visitors from other states and boosting local economies. "Parks play a key role in the economic stability and growth in communities and the state as a whole. According to the latest estimates, the annual economic impact of outdoor recreation on Nebraska is $2.64 billion…Parks, trails and outdoor recreation opportunities are major drivers in determining the quality of life in a community and should be addressed in any major community or regional planning effort." (See Appendix I- Nebraska Game and Parks "Statewide Comprehensive Outdoor Recreation Plan" 2021-2025, p. 94)

In 2021, the Nebraska Legislature passed LB406, which established the Statewide Tourism And Recreational Water Access and Resource Sustainability (STARWARS) Special Committee of the Legislature. One of the Committee's tasks was conducting a study on a potential opportunity within the floodway of Sarpy County near the Platte River to construct a lake that would offer Nebraskans in the eastern part of the State recreational opportunities seen in other areas of the State. In addition to possible flood control and public recreation opportunities, a potential lake could provide economic development opportunities of a size and scope not seen anywhere else in eastern Nebraska and similar to other lake tourist destinations in the Midwest.

In 2022, the Nebraska Legislature appropriated money from the Jobs and Economic Development Initiatives (JEDI) Fund to the Nebraska Department of Natural Resources for the purpose of implementing the provisions of the Act, including evaluating the financial feasibility of public-private partnerships that could facilitate the construction and operation of a recreational lake. A 2022 HDR study sought to "identify opportunities to maximize recreational opportunities and tourism, provide resilience of available water supply, improve water quality, and provide increased opportunities for habitat preservation—either in conjunction with identified flood mitigation measures or as stand-alone initiatives." (See Appendix II- HDR, Inc.'s *Plan Preserve Play: STAR WARS Special Committee Final Report*, pg. 6) ("HDR Study")

In 2023, the Nebraska Department of Natural Resources engaged Nebraska Recreational Lake Trust to prepare a pre-feasibility analysis to determine, pursuant to the JEDI Act, the interest of private parties to contribute to the cost of constructing and developing a lake and recreation area in Western Sarpy County, in addition to any State funding for the project. The initiative of focus for this 2023-24 phase of study is a 3,500 to 4,000 acre lake constructed adjacent to the Platte River to provide recreational and economic development opportunities.

One potential lake location was used as a conceptual project in the HDR Study, and is again being used in this report for illustrative purposes. The potential lake area would stretch from 237$^{th}$ Street at the edge of Gretna to the Platte River on the west. It would be bordered by I-80 on

the south and end near the Lincoln Road and 240th Street intersection at the northern most point. (See Appendix III) The potential lake area would be around 3,600 surface acres with the overall development area around 4,000 acres. The lake would be similar in size to West Okoboji Lake and the largest lake in Eastern Nebraska, being double the size of Branched Oak Lake in Lancaster County (currently the largest lake in Eastern Nebraska per outdoornebraska.gov). Unlike other lakes of this size, the potential lake as currently envisioned would not be dammed from the Platte River, but rather created by a sand pit within the floodplain near the Platte River. The entirety of the potential lake, as set forth in the HDR Study, is in the floodway zone and the surrounding development is in Zone AE, which has a 1% chance of flooding in any given year (See Appendix IV). Therefore, a recreational lake area is likely the economically best use of the area.

If the results of this pre-feasibility assessment determine that there is sufficient interest from private investors and public-private partnerships, then the Department of Natural Resources can determine the best course of action to explore a recreational lake area. Of note, proceeding with a full feasibility study is also dependent on the outcome of the study being conducted for the Nebraska Department of Natural Resources regarding the Lincoln and Omaha water supply, which is also due to the Department of Natural Resources near the time of this report.

Based upon Nebraska Recreational Lake Trust's findings, as set forth herein, the recommendation is that adequate interest is present from private developers and philanthropists to move forward with next steps of the project, such as a feasibility study to accurately provide an in-depth analysis of technical, regulatory, and environmental issues that have not been assessed or need to be updated from the HDR Study, including updated costs to construct the lake. It would also determine if the potential location and size of the recreational area will remain as currently conceptualized or needs to be revised.

## II. Project Assumptions

a. Nebraska Recreational Lake Trust engaged with potential stakeholders under the assumption that the lake was in existence. Inquiries to prospective developers and private partners at this phase have only consisted of development surrounding the lake. Accordingly, this report does not provide analysis of logistics, feasibility or cost of completing the lake dredging or other construction. Stakeholders engaged in this phase of study have not been asked directly about contributing to the cost of building the lake.
b. Nebraska Recreational Lake Trust engaged with potential stakeholders under the assumption that the real estate encompassing the entirety of the approximately 4,000 acres (lake and surrounding development) has been acquired, with the mechanism of such acquisition for later consideration.
c. Nebraska Recreational Lake Trust engaged with potential stakeholders under the assumption that costs and capacity of development are as set forth in the earlier HDR Study. All stakeholders were provided with a copy of the HDR Study from 2022 for reference.
d. Nebraska Recreational Lake Trust has performed no technical review during this reporting period, including but not limited to, regulatory or environmental issues.

These items remain for further consideration during the feasibility study and furtherance of the project may require prior approval from agencies not yet contacted at this phase of reporting. A specific timeline for project completion cannot be provided at this phase of reporting due to the uncertainty of approvals from various state and federal agencies.

## III. Analysis Performed by Nebraska Recreational Lake Trust

### a. Goal of JEDI Act

One key element of the Jobs and Economic Development Initiative Act is to have private parties contribute to the cost of constructing and developing the lake area. Accordingly, Nebraska Recreational Lake Trust has been tasked with identifying if there is interest, resources, and financial support for the project from the private sector, consisting of two potential partners: philanthropists and private developers. The Legislature intends that public-private partnerships would be a key component of developing the lake, while also supporting the intention to retain recreational opportunities that benefit the general public.

### b. Identification of Potential Key Stakeholders

Nebraska Recreational Lake Trust identified potential key stakeholders to the Lake 80 project as follows:

i. State of Nebraska—the State will participate through financial investment in the project and ultimately some form of to-be-determined ownership/management interest in the project. State agencies will also provide support to the project in aspects such as technical analysis, permitting, and land acquisition.
ii. Legislature—Completion of the project may require state financing incentives and possibly new legislation to attract private development opportunities.
iii. City of Ashland and Gretna—While the potential lake area falls within Sarpy County and not the current boundaries of Gretna or Ashland, all surrounding communities could benefit from the economic growth of the lake project through job creation, increased tourism, and attracting and retaining residents.
iv. Private Philanthropists—Philanthropy's role in the lake project could support the areas beyond private development to ensure that amenities remain open to the public, and additionally, that there remains undeveloped areas of the lake devoted to recreation and parks.
v. Private Developers—Under the assumed lake configuration, development on one half of the lake will likely consist of primarily private residential development due to the floodplain near the Platte River. Other development opportunities, as set forth in the HDR Study, include retail, dining, and rental lodging.

### c. Deliverables

Nebraska Recreational Lake Trust was asked to engage with the philanthropic community and private developers to determine the financial capability, viability, and sustainability of project

partnerships, including key project components that will be necessary to support the long-term financing for the project. Nebraska Recreational Lake Trust focused stakeholder discussions on:

i. Is there demand and financial support for this type of project from the private sector?
ii. Is public/private partnership the best configuration for delivering the desired outcome? Other alternatives to consider?
iii. Do the economics of private funding support long-term sustainability?

During this preliminary phase, the focus of inquiry was limited to the above as it relates to development surrounding the lake. Initiatives for recreation and economic development were identified through conversations with potential key stakeholders. The feasibility and mechanics of building the lake were not discussed at length with philanthropists or developers, because there was no explicit interest from philanthropists or private developers in financing the lake itself without defined State and County involvement in the lake creation. This phase of engagement by Nebraska Recreational Lake Trust also did not include environmental compliance, regulatory permitting, or flood mitigation initiatives, and relied upon the HDR Study. These issues were generally discussed and considered with potential stakeholders, but were beyond the scope of this phase and are better suited for a feasibility study.

This project presents a unique opportunity for a public private partnership on not only the type of project but a scale unprecedented in the Omaha and Lincoln area. Due to the distinctive nature of the project, with little history to reference on this type of project in Nebraska or the Midwest, it is important to ascertain whether the funding requirements can be met by collaboration with the public and private sectors, views of prospective investors on the risks associated with the project, the need for government support, as well as the financial impact of the project to the surrounding area. This feedback will ultimately influence whether there is market interest to proceed with the next phase of study.

The inquiries made during this phase of reporting are not intended to supersede the prior HDR Study but targeted to determine whether there is interest in the potential development as conceptualized in the HDR Study.

**d. Review of Public Interest**

According to Nebraska Game and Parks surveys, there is continued demand from Nebraskans for outdoor recreation attractions. 57% of Nebraskans surveyed see outdoor recreation as important to their quality of life. 46% of Nebraskans surveyed don't believe their community provides enough recreational activities. Currently the top amenities used in Douglas, Sarpy, and Lancaster Counties are hiking/biking trails and picnic areas. (See Appendix I - Nebraska Game and Parks "Statewide Comprehensive Outdoor Recreation Plan" 2021-2025, p. 55, 65) However, there is currently limited public access to lake activities, as the majority of lakes in Eastern Nebraska are privately owned. Douglas, Sarpy, and Lancaster Counties currently only have 2,356 acres of lake or pond amenities, so the addition of Lake 80 to Sarpy County or the vicinity would double the lake amenities offered in Region 1. (See Appendix I - Nebraska Game and Parks "Statewide Comprehensive Outdoor Recreation Plan" 2021-2025, p. 40) On a statewide level, 42.8% of

Nebraskans think walking trails are important amenities to have and 25.2% think outdoor swimming amenities are important to have, both of which would be offered at Lake 80. (See Appendix I - Nebraska Game and Parks "Statewide Comprehensive Outdoor Recreation Plan" 2021-2025, p. 65)

As a current example of a recreational area finding success, 390-acre Lake Cunningham (set in a 1,050 acre park), which was recently redeveloped by raising over $26 million from philanthropic donors, sells out of 90 stalls for campground reservations each weekend all summer as demand for camping continues to grow. Completed improvements include an ADA-compliant six-mile concrete multipurpose trail that loops around the lake. Other amenities include paddleboard and kayaking rentals and an 18-hole disc golf course. There are also numerous youth organizations looking for access to recreational areas for year-round camps and other activities, as evidenced by over 1,000 kids attending summer programming according to Lake Cunningham's Executive Director. (See https://explorethec.com/about/)

As part of this phase of analysis completed by Nebraska Recreational Lake Trust, the University of Nebraska Bureau of Business Research was engaged to expand upon the economic analysis provided in the HDR Study. The estimate from *An Economic Analysis of Lake 80* by the Bureau of Business Research from the University of Nebraska—Lincoln concludes there would be 1,418,100 annual visits to Lake 80 (See Appendix V, pg. 5-6). This is approximately 400,000 more annual visits than were identified for the 3 major lakes in Dickinson County, Iowa (containing Okoboji). The reason is that Lake 80 will be located in the Omaha Metropolitan Area, and quite near the Lincoln Metropolitan Area. As seen in Table 2.2 of *An Economic Analysis of Lake 80*, the rate of visits is much higher for individuals who live within 30 miles of a recreation lake. The proposed Lake 80 is located within 30 miles of much of the Omaha metropolitan area and parts of the Lincoln metropolitan area.

Table 2.2: Recreation Lake Visits Per Person and Predicted Visits to Lake 80

| Distance from Primary Residence | Visit Rate (Visits Per Person) | Predicted Annual Visits to Lake 80 |
|---|---|---|
| 0-5 miles | 0.76 | 3,700 |
| 5-10 miles | 0.76 | 15,800 |
| 10-30 miles | 0.76 | 912,800 |
| 30-60 miles | 0.34 | 75,800 |
| 60-90 miles | 0.19 | 52,600 |
| More than 90 miles | 0.11 | 357,400 |
| Total | | 1,418,100 |

Source: BBR calculations based on Iowa Lakes Project (Iowa State University) and U.S. Bureau of Census data

In summary, Lake 80 could provide tourism opportunities that include restaurants, entertainment, and shopping, which would vastly increase spending in the area that is currently lacking in such amenities.

## IV. Feasibility

### 1. Financial Viability

### a. Philanthropists

Philanthropy's role in the lake project would likely include funding of public access and recreation amenities associated with the western side of the lake, including enhancing trail networks and park connectivity. The western side of the potential lake area as set forth in the HDR Study remains in the floodway and is not conducive to development.

Nebraska Recreational Lake Trust visited with numerous philanthropists from the metro area and two major local foundations. It is clear there is support for a recreational area that offers amenities to the general public that currently are not found in the Omaha or Lincoln metro areas, or even the Midwest. "If you build it, they will come" echoed many times from philanthropists regarding the offering of outdoor recreational opportunities based on similar models of philanthropic recreational efforts in other states.

The resounding response from the philanthropic community concluded that it's important to utilize philanthropic support for amenities supporting tourism and recreation that would not duplicate amenities offered elsewhere in the vicinity, but rather to fill gaps that the private sector is less likely to address. Additionally, the long-term management and continuity of development between public and private sectors was a priority for these donors.

#### i. Examples of Other Public Private Partnership Recreational Developments

**Northwest Arkansas**

Since 2008, the Walton Family Foundation has provided over $74 million to support the construction of 208 miles of natural-surface trails and 72 miles of paved paths in the Foundation's home region of Northwest Arkansas. The foundation works with municipalities throughout Northwest Arkansas to develop trail plans, and its funding leverages matching federal, state, and local resources to complete a variety of trail projects. According to three studies from the Walton Family Foundation, the region has reaped these positive economic, social and health benefits, showing bike tourism is a significant economic driver for the region. Comparing cycling levels per capita, Northwest Arkansas reports higher daily cyclist trail use than bike-friendly areas like San Francisco. Similarly, the region reports more pedestrians per capita using trails than heavily populated areas like San Diego County. (See https://www.waltonfamilyfoundation.org/about-us/newsroom/bicycling-provides-137-million-in-economic-benefits-to-northwest-arkansas)

Since 2015, trails in Northwest Arkansas recorded a 36% increase in cycling use and a 13% increase in pedestrian activity. Ongoing expansion of the trail system is also helping create a self-sustaining regional economic engine. In 2017 alone, trails provided $137 million in economic benefits to Northwest Arkansas through tourism, events, goods and services. "[T]he foundation really stepped up and invested in the better quality of life we are trying to build for everyone here through outdoor recreation... Cycling in Northwest Arkansas is a great test case for what can

happen to a community when you have the right support." (See https://www.waltonfamilyfoundation.org/stories/home-region/building-a-lasting-legacy-of-trails-that-connect-communities)

**Gathering Place, Tulsa Oklahoma**

Gathering Place is Tulsa's Riverfront Park, which at a cost of $465 million, is the largest private gift to a community park in U.S. history. (See https://www.gatheringplace.org/donors) The park is designed to be a nature-inspired retreat within a city environment. The George Kaiser Family Foundation had a dream to transform nearly 100 acres of Tulsa's iconic waterfront along the scenic Arkansas River into a dynamic, interactive environment. Tulsans needed a welcoming, natural space where the community could come together to explore, learn, and play. In 2014, Gathering Place broke ground on Tulsa's world-class park to make a space to celebrate and gather along the river a reality. Four years later, the park was opened. (See https://www.gatheringplace.org/our-story)

**Brooklyn Bridge Park**

Brooklyn Bridge Park is the result of extensive planning and community advocacy for many decades. Brooklyn Bridge Park extends 1.3 miles along the East River on a defunct cargo shipping and storage complex, adjacent to two thriving neighborhoods and offers unparalleled viewsheds to the fabled Lower Manhattan skyline. The ambitious park design sought to transform this environmentally-hostile site into a thriving civic landscape while preserving the dramatic experience of the industrial waterfront. (See https://brooklynbridgepark.org/about/history)

In 1998, the Downtown Brooklyn Waterfront Local Development Corporation was created to undertake a public planning process for what would become Brooklyn Bridge Park. The result was the September 2000 Illustrative Master Plan, which presented a conceptual framework for the waterfront park. (See https://brooklynbridgepark.org/about/history)

On May 2, 2002, Governor George Pataki and Mayor Michael Bloomberg signed a Memorandum of Understanding (MOU) dedicating State and City funding for park construction and the creation of Brooklyn Bridge Park Development Corporation (BBPDC) to oversee its design and construction. Importantly, the MOU mandated that the Park be financially self-sufficient in its ongoing maintenance and operations, with long-term funding provided by revenue-generating development. The Brooklyn Bridge Park Conservancy transformed its mission from advocacy to support and became the primary public programming partner for the Park. (See https://brooklynbridgepark.org/about/history)

In March 2010, BBPDC opened the first section of the Park to the public at Pier 1, and later that year, BBPDC transferred responsibility for planning, building, maintaining, and operating the Park to Brooklyn Bridge Park Corporation (BBP), the not-for-profit corporation with a mission to provide an exceptional public space that connects people, nature, and the waterfront through

inclusive, innovative, and sustainable management, and design. (See https://brooklynbridgepark.org/about/history)

Brooklyn Bridge Park operates under a mandate to be financially self-sustaining. While a small fraction of the Park's operation and maintenance funds are collected from permits and concessions, the majority comes from development sites. (See https://brooklynbridgepark.org/about/history)

The Brooklyn Bridge Park Board of Directors comprises 17 Directors appointed by the Members of the Corporation on the nomination of the Mayor of the City of New York, the Governor of New York State, and local elected officials. (See https://brooklynbridgepark.org/about/brooklyn-bridge-park-corporation/) The Members of Brooklyn Bridge Park Corporation are the Mayor of the City of New York, the First Deputy Mayor of the City of New York, and the Deputy Mayor for Operations. The Brooklyn Bridge Park Community Advisory Council (CAC) is the primary forum through which the community can provide feedback and comments to the Corporation on its major projects and initiatives. Membership for the CAC was chosen in consultation with local elected officials representing the Park and area. The CAC is governed by its own set of by-laws that pertain to, among other things, selection of officers, voting, formation of committees, and the scheduling of meetings.(See https://brooklynbridgepark.org/about/brooklyn-bridge-park-corporation/corporate-governance/)

### i. Implementation Challenges

One concern voiced by the philanthropists was management of the public recreation areas to ensure upkeep of facilities and amenities so they would continue to be available to the general public and maintained in good condition over time. At other lake areas, for example, state entities such as Game and Parks have taken an active role in managing extensive sections of the recreational areas. Nebraska Recreational Lake Trust visited with numerous agencies that could play a role in managing portions of the recreational side of the lake area, including Game and Parks and Papio-Missouri River Natural Resources District. Game and Parks indicated possible interest in a boat marina or park, such as what has been done at Lake McConaughy or Lewis and Clark Lake, but on a smaller scale. Papio-Missouri River Natural Resources District indicated possible interest in funding biking/walking trails surrounding the lake and connectivity to existing trail systems. Furthermore, there is interest from non-profit organizations for a youth camp on a portion of the recreational side of the development. However, there is not one single agency that has an interest in managing the entirety of the western portion of the lake development. Presumably there will also be some involvement from agencies such as the Army Corps of Engineers.

Until the final cost and scope of the project is determined following a full feasibility study, it cannot be determined what percentage of the project could or would be supported through private philanthropy in comparison to public funding sources. Nevertheless, the philanthropic community emphasized that State and County involvement and funding is essential for this project to be a true public private partnership. Philanthropy could play a role in construction of the lake itself as well, but potential stakeholders engaged at this phase were primarily interested in surrounding amenities and seeing the State and County's commitment and financing

mechanisms contemplated by the public sector before undertaking a commitment to construction. The major obstacle on the philanthropic fundraising is that there are always competing interests looking for philanthropic support, so in order to set this project apart from other initiatives, the development as a whole must offer unique opportunities and have clear State support for both long term and short-term growth. Certainly at this point there is strong interest from potential transformational donors that warrant further inquiry like a feasibility study.

### b. Private Developers

Nebraska Recreational Lake Trust visited with many Omaha and Lincoln developers, both commercial and residential, as well as a national developer that has done large multi-use projects in the Omaha area. Developers were provided with a copy of the prior HDR Study. Responses included that the initial users of the surrounding development need to be something that will attract other development to the area, which likely means residential development will occur first and commercial development will occur secondarily. The recreational component is somewhat separate being on the other side of the lake, as currently conceptualized, but would also be key to prioritize for momentum for the development as a whole.

#### i. Implementation Challenges

##### 1. Land Acquisition

Although not within the direct scope of this phase of study, one of the questions in most conversations regarding the potential lake development as a whole was whether the State would acquire the real estate for the private development or, if the State would only acquire the real estate necessary to build the lake with the expectation that developers would be sufficiently interested in the surrounding properties to independently purchase the real estate for development. There is considerable time and cost associated with the latter option, so developers are seeking a clear trajectory for the extent of their involvement in the pre-development phases. The question was also raised whether access easements may be required from surrounding landowners not directly part of the development but that may be on the fringes of development. Recurring feedback from developers included a resounding preference for ensuring the land acquisition was completed, packaged together, "permitted and titled," and ready for development prior to the private developers' involvement, which inevitably means all land will need to be acquired from current owners prior to commencement of the project.

##### 2. Timeline

Relatedly, developers were interested in the overall timeline for development surrounding the lake, which factors into cost of construction and ability to take on other projects. Acquisition of the land will dictate overall timing on the project's commencement, but even once the project begins, the developers are looking for estimated timing on phasing of the surrounding development. Requests were also made for further information on soil conditions which would determine whether residential developments would be slab on grade or might include basements.

Some developers suggested it would be best for the lake build to be completed prior to initiating the surrounding development, both to garner further interest in the residential development surrounding the lake, but also to ensure the lake is in fact completed as proposed, as it relates to size, other amenities, etc. Developers also emphasized that a master developer/planner was essential to the continuity of development, as it would likely be a multi-phase project extended over a number of years.

### 3. Lake Construction

Nebraska Recreational Lake Trust did not delve into the issue of dredging the lake, as the focus of this pre-design phase was development surrounding the lake, although it is worth mentioning that stakeholders interviewed expressed concerns with the timeline and economics of dredging a lake compared to damming a lake. Potential lake locations east and west of the Platte River were identified for the previous HDR Study. Potential sites on the east side of the Platte River were prioritized based on access and existing infrastructure considerations (pg. 13 HDR, Inc.'s *Plan Preserve Play: STAR WARS Special Committee Final Report).*

Estimates of completion based on HDR's investigation approximate 7-10 years to dredge the lake and have the surrounding area prepared for development. The directives and assumptions in the HDR Study to date concurred that dredging the lake was the favored method for lake construction due to ecological and environmental concerns with damming the lake, but this concept is likely worth further exploration during the full feasibility study. However, it should be noted that the time required to construct the lake is dependent on available funding and the various mechanisms ultimately utilized to dig the lake, which could condense or extend the above timeline.

### 4. Infrastructure

Following the primary concerns about overall timing and phasing of the project, the next biggest inquiry from developers was regarding infrastructure. Most notably sewer and road access. Based on recommendations and feedback from the developers that formation of a Sanitary Improvement District (SID) would be a likely path forward to develop infrastructure, Nebraska Recreational Lake Trust met with both a SID fiscal agent and SID engineers. Responses suggested that a phased SID strategy, likely at least two SIDs, would be required to support the expected residential development surrounding the lake. The SID structure would reduce costs of the lots upfront since the developer would not be absorbing infrastructure costs, which certainly makes the development more appealing. For example, in parts of Nebraska that do not use SIDs, the cost of undeveloped lots is considerably higher.

SID Engineers provided a high-level analysis of an SID as a possible tool for financing infrastructure in the development surrounding the lake, to determine how effective an SID would be in this development. The analysis was based off the HDR Study regarding number of units of each type of potential residential or commercial units. It's acknowledged that some of the inputs on the SID cost estimate were reasonable estimations based on the unknown variables that come with this type of novel project, as well as a substantial contingency. The result demonstrated the debt ratio based on proposed SID improvements was approximately double what the target debt

ratio is for a typical SID. Even assuming a multi-phase development, the upfront cost for infrastructure for a development of this size where no infrastructure currently exists makes the feasibility of a successful SID very difficult without additional financing mechanisms.

Concerns were voiced regarding highway onramps and offramps for access to the new developments, not only for residents but for access to public amenities and any inundation of traffic that would occur on weekends as families visit the parks, sports facilities, and other accommodations available at the lake. Also, possible bridge widening of the existing bridge over Highway 6 and the existing railroad line to connect each side of the potential development, in addition to a potential pedestrian bridge. Additionally, the issue was raised whether widening of 237th Street would be required, assuming that is the eastern most edge of the lake development, to improve traffic capacity and flow. Further analysis and conversation will be required under the feasibility study with the Nebraska Department of Transportation regarding such issues.

The potential lake location, as currently shown in the HDR Study, straddles a Burlington Northern Railroad line that runs parallel to Highway 6. Addressing this was an area of high concern for not only the development of the surrounding area –for example, not wanting to build a high-end residential development near a railroad track—but also for infrastructure purposes as to how the railroad would be handled, whether that means a bridge will be built over the lake, if relocation of the rail line is possible, or if alternatively, the lake area needs to be shifted north so the entirety of the development is north of the railroad line and Highway 6, or to an alternative location.

### 5. Other Challenges

Another discussion point raised by developers was what school district the new residential development would fall under, which would likely influence interest in home sales. Also ensuring access to essential amenities such as grocery stores and gas stations in close proximity to the new residential development is key.

From the existing renderings, certain home lots have lake access but not all. A consideration may need to be a layout that makes the lake accessible to all residents so the more distant lots remain desirable as well. This could potentially be an offering like a beach trail that would give those without direct lake access an efficient way to the lake. Or, in the alternative, a set up similar to Lake Zorinsky where no home lots are directly on the lake, but all residents have water access through a trail.

Ultimately, developer concerns can be summarized as primarily acquisition of real estate and related timing, and assuming this is feasible, the secondary concern is infrastructure development.

### 6. Example of Master Planned Lake Community

As part of this assessment, Nebraska Recreational Lake Trust visited with Hines Development regarding its master planned community “Lakeside at Tessera” on Lake Travis in Lago Vista, Texas. This private development consists of over 800 acres that features solely residential homes

adjacent to Lake Travis outside of Austin, Texas. The development commenced in 2007 and is now nearing completion. While not a public private partnership, this development is a great example of the private development opportunities for the eastern side of the potential lake as currently conceptualized in the HDR Study.

The planned community centers around a lakeside lifestyle, including trails and open space. There is lake access for all residents, but there are no lots directly on the waterfront. The areas closest to the waterfront consist of community recreation areas and a boat ramp. The property was purchased in 2007 but the first lot sales did not occur until 2014. While some of this can be attributed to the financial crisis of 2008, this timeline indicates the process of development from inception to completion for a water-focused community is lengthy. And it is worth noting that Lake Travis is part of a string of reservoirs known as the Highland Lakes, so it is a dammed lake created to control water levels throughout the Colorado River basin. Consequently, the timeline of seven years to begin lot sales and estimated twenty years to completion of development did not include an undertaking to dig a lake, as would be required for Lake 80.

The community exemplifies the high barriers to entry in development near a body of water. Hines encountered challenges related to endangered species habitat area, water quality, rock formations, berms, ponds, filtration systems, and more. The Lakeside at Tessera project is a great example of collaborations required between the developer and local and national agencies, such as the US Army Corps of Engineers, the Lower Colorado River Authority, and the Texas Commission for Environmental Quality.

The project required a team of engineers, environmental consulting experts and others working in tandem to fully complete the land development. Many of the other obstacles faced during development include infrastructure challenges like those raised by developers for Lake 80.

Lakeside at Tessera was activated through a number of financial incentives offered through the City of Lago Vista and State of Texas that could be developed or expanded in Nebraska, including:

Tax increment financing (TIF) is a method local governments can use to pay for improvements that will draw private investment to an area. Tax increment financing redirects property tax in a geographic area designated as a Tax Increment Reinvestment Zone (TIRZ) to pay for improvements in the zone. (See https://comptroller.texas.gov/economy/development/prop-tax/ch311/)

A Municipal Utility District (MUD) is one of several types of special districts that function as independent, limited governments. The purpose of a MUD is to provide a developer an alternate way to finance infrastructure, such as water, sewer, drainage, and road facilities. (See https://services.austintexas.gov/edims/document.cfm?id=227010#:~:text=A%20Municipal%20Utility%20District%20(MUD,%2C%20drainage%2C%20and%20road%20facilities.)

The State of Texas grants municipalities and counties the power to create Public Improvement Districts (PIDs) under Chapter 372 of the Local Government Code to help spur economic development by providing a means to improve infrastructure and promote economic growth.

Moreover, PIDs provide for the financing of the costs of public improvements or services that benefit a definable part of the County with the costs borne by those landowners within the PID boundaries who receive special benefits from the public improvements or services. State law allows a wide variety of improvements, such as landscaping, affordable housing, sidewalks, art, libraries, mass transportation facilities, utilities as well as services to promote the PID and its administrative expenses. (See https://www.traviscountytx.gov/planning-budget/economic-development-strategic-investments/public-improvement-districts)

Texas Infrastructure Program through the Texas Economic Development & Tourism Office offers incentives and financial programs to promote job creation, economic development, and capital investment. The goal is to offer competitive incentives to companies who are creating jobs and driving innovation in Texas. (See https://gov.texas.gov/business/page/incentives)

380 Agreements with individual cities are economic development programs under Chapter 380 of the Local Government Code authorizes municipalities to offer loans and grants of city funds or services at little or no cost to promote state and local economic development and to stimulate business and commercial activity. (See https://comptroller.texas.gov/economy/development/grants/ch380-381/)

### c. Other Potential Key Stakeholder Meetings

Nebraska Recreational Lake Trust also met with a number of other potential key stakeholders from the Gretna and Ashland area, including the Mayor of Gretna, Ashland City Council President, State Senators, and other local residents, business owners, and philanthropists from the potential lake area. The obstacles identified by these groups were largely the same as mentioned above.

Sarpy County Administrators focused on three issues. First, sewer infrastructure, which they believe is solvable. Second, roads and ensuring access and traffic control, which they believe is also solvable. Third, ensuring the location of the lake development does not detract from Sarpy County's further plans, which they believe the potential location dovetails with future growth of the area. The biggest discussion from all Sarpy County stakeholders focused on transportation infrastructure as a key priority and ensuring access points and roads would be appropriately developed to handle the presumed influx of residents and visitors to the lake site. County administrators noted studies are already underway in the Western Sarpy Transportation Enhancement Plan regarding a possible connection of I-29 to I-80, as well as a highly debated interchange at Pflug Road or Platteview Road.

## 2. Economic Analysis of Lake 80

Beyond interest from the local market, which is a resounding "yes" given the lack of water recreation amenities in the area, there must be an assessment of revenue potential of the project and a proposed business model. The main objective of the economic analysis completed by the Bureau of Business Research at University of Nebraska—Lincoln was to examine the potential implications of Lake 80 for the regional economy. The Bureau of Business Research at University of Nebraska—Lincoln relied in part on the HRD study. In particular, the Bureau of

Business Research study used the cost estimates from the HDR Study as the basis for their construction period economic impact analysis. Like HDR, the Bureau of Business Research also used projected spending by Nebraska visitors and new residents to estimate the annual economic impact of a completed lake. Highlights from the Bureau of Business Research at University of Nebraska—Lincoln analysis follow below, see the full report at Appendix V.

### a. Economic Implications

The following table presents the estimated costs associated with the construction of Lake 80. The table shows the estimated cost of construction for each of the project elements. Construction costs estimates are from the HDR report. (See Appendix II- HDR, Inc.'s *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis*, pg. 8)

| **Project Elements** | **Direct Construction Spending** |
|---|---|
| Property Acquisition | $185.5M |
| Permitting | $26.3M |
| Lake Construction | $1500M |
| Infrastructure | $406.9M |
| Park | $128.2M |
| Neighborhood | $1,024.3M |
| **Total** | **$3,271.1M** |

Source: HDR, Inc.'s *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis*

A portion of construction spending leads to a direct impact on the state economy. This occurs when construction spending is supported by the spending from out of state sources and donations. Beyond this direct economic impact, there is an additional "multiplier" impact related to the construction of the lake. The multiplier impact results both as 1) construction, engineering and other businesses directly involved in lake development purchase supplies and services from other Nebraska businesses and 2) as employees of these construction and engineering businesses spend their paychecks within the state. Multiplier impacts are estimated using IMPLAN. That model develops multiplier estimates for states which show the ratio between the direct spending on construction or engineering and multiplier spending in the rest of the economy.

Direct impacts are added to multiplier impacts to yield the total economic impact. The total economic impact also can be estimated in terms of labor market concepts such as employment and labor income. Labor income includes employee wages, salaries and benefits. Total economic impacts are reported in Table 4.3 from the UNL Bureau of Business Research report. The total economic impact on Nebraska during the estimated 8-year construction period is $1.34 billion. This economic impact includes $0.46 billion in labor income earned during an estimated 7,420 job-years. A job-year is the equivalent of a full-year of employment.

Table 4.3: Direct Economic and Total Impact of Lake 80 Construction

| Type | Direct Impact (Millions $) | Multiplier Impact (Millions $) | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Job-Year |
|---|---|---|---|---|---|
| Property Acquisition | $4.6 | $4.1 | $8.7 | $1.4 | 44 |
| Permitting | $6.6 | $5.1 | $11.7 | $4.5 | 61 |
| Lake Construction | | | | | |
| Engineering | $23.8 | $21.0 | $44.8 | $19.0 | 247 |
| Construction | $337.5 | $120.3 | $457.8 | $129.6 | 2,025 |
| Infrastructure | | | | | |
| Engineering | $16.2 | $14.3 | $30.5 | $12.9 | 168 |
| Construction | $76.3 | $37.8 | $114.1 | $23.7 | 312 |
| Park | $128.3 | $107.5 | $235.8 | $86.9 | 1,470 |
| Neighborhood | $256.1 | $184.7 | $440.8 | $179.4 | 3,094 |
| Total | $849.4 | $494.8 | $1,344.2 | $457.4 | 7,420 |

Source: UNL-BBR calculations using IMPLAN

### b. Annual Economic Impact

The annual economic impact of Lake 80 on the Nebraska economy was derived from two primary sources. The first would be the visitor spending as residents of the region travel to Lake 80 for recreational opportunities during day visits and overnight trips. The second would be the increase in population in Nebraska due to the planned residential development adjacent to Lake 80. Additional economic impact estimates can be found in Appendix II - HDR, Inc.'s *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis.*

#### i. Visitor Spending

It was estimated that the proposed Lake 80 would have a total of 1,418,100 annual visits based on recreation lakes in neighboring states. Those visits would generate an estimated $95.7 million per year in visitor spending on fishing and boating supplies, food and restaurants, lodging and other recreation spending. Table 2.4 from the UNL-BBR report shows the breakdown of that new annual spending, and that $30.3 million of that spending would be on food and beverages, $25.1 million on boating and fishing supplies and $11.1 million on lodging.

Table 2.4: Potential Annual Spending Due to Visits to Lake 80

| Spending Category | Estimated Annual Spending (Millions $) |
|---|---|
| Supplies | $25.1M |
| Food and Beverages | $30.3M |
| Gasoline | $17.4M |
| Lodging | $11.1M |
| Shopping | $9.8M |
| Entertainment | $1.4M |
| Other | $0.5M |
| Total | $95.7M |

Source: BBR calculations based on information in Wan, Ji and Zhang, 2021; 2022

It was further estimated in the UNL-BBR report that 33.1% of annual trips to Lake 80 would be by residents of another state, or "retained" trips by Nebraska households, that is, trips to Lake 80 that would have otherwise been taken to an out of state lake. This share implies that there would be an estimated $31.7 million ***increase*** in annual visitor spending in Nebraska if Lake 80 is built. Table 4.4 from the UNL BBR report shows the breakdown of that new annual spending.

Table 4.4: Estimated New Annual Visitor Spending in Nebraska Due to Lake 80

| Spending Category | Estimated Annual Spending (Millions $) | Direct Impact (Millions $) |
|---|---|---|
| Supplies | $8.3M | $4.1M |
| Food and Beverages | $10.0M | $10.0M |
| Gasoline | $5.5M | $1.4M |
| Lodging | $3.7M | $3.7M |
| Shopping | $3.3M | $1.4M |
| Entertainment | $0.5M | $0.5M |
| Other | $0.2M | $0.2M |
| Total | $31.7M | $21.4M |

Source: BBR calculations

The total annual economic impact of visitor was estimated to be $38.3 million in the UNL-BBR report. More than half of that total impact is due to the direct economic impact but approximately 45 percent is due to the multiplier impact. The multiplier impact can be thought of as the additional business sales occurring in the Omaha area but outside of the hospitality industry. That total annual economic impact would include $11.8 million in labor income each year earned in an estimated 335 jobs. The largest annual impact would be due to the sale of food and beverages.

Table 4.5: Direct and Total Annual Economic Impact of Visits to Lake 80

| Type | Direct Impact (Millions $) | Multiplier Impact (Millions $) | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Employment |
|---|---|---|---|---|---|
| Supplies | $4.1M | $3.6M | $7.7M | $2.7M | 81 |
| Food and Beverages | $10.0M | $7.8M | $17.9M | $5.0M | 146 |
| Gasoline | $1.4M | $1.1M | $2.5M | $0.6M | 15 |
| Lodging | $3.7M | $2.6M | $6.3M | $2.0M | 47 |
| Shopping | $1.4M | $1.3M | $2.7M | $1.0M | 26 |
| Entertainment | $0.5M | $0.4M | $0.9M | $0.4M | 14 |
| Other | 0.2M | $0.1M | $0.3M | $0.1M | 5 |
| Total | $21.4M | $17.0M | $38.3M | $11.8M | 335 |

Source: UNL-BBR calculations.
Note: The direct impact and multiplier impact may not precisely sum to total impact due to rounding.

### ii. New Residents

Recreation lakes attract new residents as well as visitors. As noted in the UNL-BBR report, this is best seen in data for non-metropolitan recreation lakes, which are often located in regions with small and falling populations. In such a setting, strong population growth is likely tied to the lake rather than other factors which drive growth in metropolitan areas. (See Appendix V, pg. 8)

For a frame of reference, the long-run population growth of Dickinson County, Iowa, which is home to West Okoboji Lake, East Okoboji Lake and Big Spirit Lake, increased by 42 percent from 1950 to 2023 compared with a 29 percent decline in population in surrounding counties. In this example, population growth was 70 percent faster in the county that is home to the major recreation lakes. A 70 percent faster rate of growth is equivalent to 9,000 new residents in Dickinson County. (See Appendix V, pg. 9)

Population trends in Clear Lake, Iowa also showed a similar pattern. The population of Clear Lake, Iowa grew by 52 percent from 1950 to 2023, but population declined by 25 percent in the balance of Cerro Gordo County and surrounding counties during the period. This faster rate of growth is equivalent to 3,800 new residents in Clear Lake. (See Appendix V, pg. 9)

Consistent with these examples, the UNL-BBR report estimates that new residential development adjacent to Lake 80 would support 3,097 primary new housing units for residents. The report also estimated the development would include 4,066 “additional” homes, such as second homes or rental properties. The estimated 3,097 primary residences would house families who would contribute to local spending and in some cases, add to the state labor force. These new residents living along Lake 80 would include both persons moving to the Omaha area for an opportunity to live next to a recreation lake, as well as residents of the Omaha Metropolitan

Area, Lincoln Metropolitan Area or other nearby regions of Nebraska choosing to move locally to a home on Lake 80. In other words, primary homeowners would represent a mix of new and existing residents for Nebraska. (See Appendix V, pg. 28)

New residents also would generate an annual impact on the Nebraska economy. Table 4.7 from the UNL BBR report shows the estimated total annual economic impact of Lake 80, due to both increased visits and new homeowners in Nebraska. There is a total annual impact on Nebraska of $237.0 million in output (business sales), including $127.2 million in labor income. This labor income is spread over an estimated 1,461 full-year equivalent jobs.

Table 4.7: Total Annual Economic Impact on Nebraska from Lake 80 Net New Visitors and Homeowners

| Type | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Employment |
|---|---|---|---|
| Net New Visits | $38.3M | $11.8M | 335 |
| New Housing Units | $198.7M | $115.4M | 1,126 |
| Total | $237.0M | $127.2M | 1,461 |

Source: UNL-BBR calculations

It is important to note that it will take a number of years for this full annual impact to develop. Even after Lake 80 is completed and opened, new residential and commercial developments will be put in place steadily over time and may take a decade or more to be fully implemented. At the same time, there are other potential economic impacts that are difficult to measure, and therefore, could not be included in the impact estimates. In particular, the development of Lake 80 would create a major new recreation amenity for Nebraska. Such an amenity would help Nebraska in its competition for residents and workers. (See Appendix V, pg. 30)

From an economic standpoint, the proposed Lake 80 would be an impactful project for Nebraska. Lake 80 would yield large annual visitor impacts for Nebraska. It is projected that the lake would attract hundreds of thousands of visitors each year from neighboring states. The lake also would retain Nebraskans who currently visit recreation lakes in other states. The economic impact of new visits is estimated at $237 million per year. Construction of Lake 80 and an adjacent commercial and residential development also would generate impacts over the coming decade. Required construction would be expected to yield a $1.3 billion economic impact during the construction period. This level of impact is associated with approximately 7,400 job-years of employment in Nebraska. (See Appendix V, pg. 35)

## 3. Short-term and Long-term Sustainability

### i. Funding Opportunities

The breadth of this pre-design phase did not include an in-depth analysis into financing options for the construction of the lake or the economics of development around the lake, but given recent legislation, such as the "Good Life Districts," it is worth considering how existing or related financing incentives, both locally and nationally, may be relevant to this project. For example, reviewing the success of tax incentives at developments such as Lake Travis, revenue generating operations at Brooklyn Bridge Park, and others around the country.

### ii. Management Structure

A question received again and again from both private sector and public sector potential stakeholders during this phase of analysis was how will the lake development be managed long term to ensure not only the quality of the amenities remains, but also the financial investment by both the public and private sector is managed prudently. Ongoing management requires a two-pronged approach covering both a day-to-day oversight of amenities for the general public but also high-level management of overall operations and ongoing economic benefit.

Based on input from the potential stakeholders mentioned above, Nebraska Recreational Lake Trust would recommend further analysis of a management entity like the Metropolitan Entertainment & Convention Authority (MECA), which currently operates the CHI Health Center Omaha, Charles Schwab Field Omaha, and Omaha's riverfront. MECA is a 501(c)(3) non-profit organization that manages these public arenas through a lease and development agreement with the City of Omaha. All of the aforementioned projects were made possible through public private partnerships, with a substantial level of private financial support for these projects, as it's anticipated would also occur with the lake project. MECA is governed by a board of five appointed, independent directors and overseen by a dedicated management team. Board members are determined by the City of Omaha with appointments rotating between the City Council and the Mayor. (See https://omahameca.org/who-we-are/ )

Lake Cunningham also demonstrates an ongoing partnership management strategy between Lake Cunningham Development Trust, a 501(c)(3) organization which operates, maintains and fundraises for the park, with an agreement in place between the U.S. Army Corps of Engineers and the City of Omaha, who own the park. (See https://explorethec.com/about/)

Appointments to the board of the eventual entity governing the lake project could include state representative(s), perhaps by Governor appointment, representation of those agencies involved in funding and management of the lake (Department of Natural Resources, Game and Parks, others to be determined), but also representation from the private sector involved in the project such as the master developer and others to be determined.

## V. Conclusion and Recommendations for Further Analysis

Nebraska is uniquely positioned to offer a destination of the kind contemplated by Lake 80. Nebraska offers low cost of living, great job opportunities, and good people. Nebraska offers arts, culture, sports and entertainment, but is truly lacking in outdoor recreation on the eastern side of the State. Lake 80's centralized location relative to other metropolitan areas that are interested in water recreation makes a recreational lake of this size a transformational benefit to the "Good Life." As demonstrated by tourism benefits of other large recreational lakes in other parts of the state, including Lake McConaughy and Lewis and Clark Lake, the type of lake contemplated by Lake 80 could provide economic and recreational benefits to residents of eastern Nebraska and beyond. Lake 80 could be positioned near other attractions, such as Mahoney State Park, to connect various recreational opportunities in and around Douglas, Cass and Sarpy Counties.

This project would offer a unique public private partnership opportunity and the first of its kind in the State. The location between Lincoln and Omaha not only benefits both cities but makes it an accessible attraction to those coming from farther away. The size and scope of this project would set it to compete with recreational destinations such as Lake Okoboji and Lake of the Ozarks, and build upon Nebraska's reputation as a thriving region for ambitious community projects. A lake development of this scale would provide economic development now and for years to come, which further spurs modernization efforts already underway as Sarpy County continues to grow. The end result being to keep Nebraskans in Nebraska, which has abundant benefits for the State and for citizens enjoying these new amenities.

Given the flood zone designation of potential lake area, and that the western side of the potential location remains undevelopable, the most practical use is likely a recreational lake area which will draw in tourism, create jobs, and hopefully draw residents and non-residents alike to stay local. Continuing the current trajectory of Western Sarpy County, it is highly likely the potential Lake 80 area becomes one innovative recreational destination, or inevitably becomes many small privately-owned lakes as are currently being developed in the area. The idea of a 3,600 acre recreational lake is likely more economically impactful, and dovetails nicely to the existing Gretna development and expanded growth between Omaha and Lincoln.

As previously noted by HDR, the complexity and size of the potential lake project requires additional evaluation to determine the project size, location, components, and ultimately the technical and financial feasibility. This phase of pre-design analysis was to conduct evaluations necessary to conceptually define the elements related to development surrounding the lake, including private parties and philanthropic involvement; however, there is further inquiry required to fully determine technical and financial feasibility of the project.

The potential elements of the project cost sharing may look as follows based on conversations with stakeholders to date:

| Project Elements | Direct Construction Spending | Potential Cost Share |
|---|---|---|
| Property Acquisition | $185.5M | Public, Private Developers |
| Permitting | $26.3M | Public |
| Lake Construction | $1,500M | Public, Private Developers, Philanthropists |
| Infrastructure | $406.9M | Public, Private Developers |
| Park | $128.2M | Philanthropists |
| Neighborhood | $1,024.3M | Private Developers |
| **Total** | **$3,271.1M** | |

Despite the definite interest in a lake development, there needs to be a fundamental analysis of whether a dredged lake is the most efficient method for accomplishing the objective of a recreational park. From preliminary review to date, it appears there could be significant engineering, environmental, and economic obstacles for digging a lake. It makes sense to evaluate whether there is a location where the same objective can be accomplished in a more cost effective and timely manner, whether by dredging a lake as currently conceptualized or by other methods.

The next phase of study should ultimately determine what is legitimately feasible, regardless of location or mechanism for creating the lake, which may deviate from the directives for this phase of study or previous studies. The current evaluation was conducted under a number of assumptions using the HDR Study; however, based on potential challenges to implementation, the full feasibility phase should determine not only the obstacles as currently positioned, but also alternative opportunities for the project to succeed. The continuation of the project should not entirely hinge on the current proposed location and structure as a dredged lake, but should be based upon a complete review of the available locations for the success of a lake that is clearly highly desirable by all potential stakeholders.

If the lake project proceeds, regardless of the mechanism for creating the lake, there needs to be a management structure in place to ensure long term sustainability. There would likely need to be a management agreement in place between the State/County/City authorities, private parties, and a 501(c)(3) entity. There are projects nationally that can serve as blueprints for self-sustaining economic models of public private partnerships of park developments.

Ultimately, this project would offer providers of outdoor recreational opportunities –the State, City, County, agencies, developers, nonprofits, and more –to come together and each play a unique role in public recreation for citizens of Nebraska. A feasibility study would strategically advance the direction of the lake opportunity by focusing on the action items to guide policymakers and government officials on the best course of action for expanding Nebraska's recreational offerings in a manner that encourages sustainability and collaboration.

# Appendix I

# Nebraska Game and Parks "Statewide Comprehensive Outdoor Recreation Plan" 2021-2025

2021 - 2025

# GUIDING SUCCESS

## IN NEBRASKA OUTDOOR RECREATION

NEBRASKA GAME PARKS

**Statewide Comprehensive Outdoor Recreation Plan**

*Playing at the playground at Barnett Park in McCook. This city park was funded by the Land and Water Conservation Fund. (Red Willow County)*

# 2021 – 2025
# Statewide Comprehensive Outdoor Recreation Plan

# GUIDING SUCCESS

## IN NEBRASKA OUTDOOR RECREATION

Developed by the Nebraska Game and Parks Commission

NEBRASKA GAME PARKS

**OutdoorNebraska.org**

Pete Ricketts
Governor

STATE OF NEBRASKA
OFFICE OF THE GOVERNOR
P.O. Box 94848 • Lincoln, Nebraska 68509-4848
Phone: (402) 471-2244 • pete.ricketts@nebraska.gov

My Fellow Nebraskans and Visitors:

Nebraska has a rich outdoor heritage of some of the most scenic landscapes in the country that offer a variety of outdoor recreation experiences. From zip-lining and wall-climbing at the Venture Parks or bicycling down the Cowboy Recreation and Nature Trail; to tubing along the North Loup River; hiking, picnicking, fishing, hunting, and playing with family and friends. Nebraska has something to offer for every recreation enthusiast, and we are dedicated to offering opportunities for every citizen to enjoy the great outdoors.

This outdoor recreation plan adheres to all procedures regarding the U.S. Department of the Interior and Land and Water Conservation Fund (LWCF) Stateside Assistance Grant Program of 1965. LWCF has provided more than $49 million in assistance to the State of Nebraska over the past 54 years. Ninety-seven percent of Nebraska counties have benefited from these funds through the projects completed. From land acquisition for parks, to development of splash pads, trails, picnic shelters, playgrounds, and museums, the LWCF Stateside program has helped improve outdoor recreation and the quality of life of Nebraskans.

This plan was developed by the Nebraska Game and Parks Commission's Planning and Programming Division. The plan represents the current status of recreation trends, demands and supply in our state, and guidance on how to proceed with future developments of parks lands sustainably within the State of Nebraska. Public participation was a major component of this plan, with people responding to the statewide survey; being members of focus groups targeted toward specific audiences; filling out the outdoor recreation community questionnaire, and speaking up at advisory committee meetings. I am pleased to approve the 2021 Nebraska Statewide Comprehensive Outdoor Recreation Plan as a guide for outdoor recreation planning and management in Nebraska for the next five years.

As Governor of Nebraska, I recognize the positive impacts that parks, open space, and outdoor recreation opportunities have on creating a healthier state and a better place to live. I believe that the quality of life and economic well-being of all Nebraskans will be enriched by the recommendations in this plan.

Sincerely,

Pete Ricketts
Governor

*An Equal Opportunity Employer*

NEBRASKA GAME PARKS

2200 N. 33rd St. • P.O. Box 30370 • Lincoln, NE 68503-0370 • Phone: 402-471-0641

Dear Outdoor Recreation Enthusiasts:

Nebraskans have a deep-rooted passion for the outdoors, which is evident in our great parks and outdoor recreation resources. We value our natural environment and park areas because they help sustain a better quality of life. The activities and services offered at our parks are available because of the commitment federal, state, and local partners have dedicated to protecting and enhancing those opportunities. The Nebraska Game and Parks Commission is pleased to present the 2021-2025 Statewide Comprehensive Outdoor Recreation Plan (SCORP): Guiding Success in Nebraska Outdoor Recreation. This plan outlines the supply and demand for recreation in the state, our changing demographics, and tips to help communities and recreation professionals in their recreation success stories.

Great care was taken to receive public opinion to understand the needs and desires of the public when planning for future outdoor recreation offerings. Analysis on the current state of outdoor recreation and how it can be improved was completed as a part of this plan.

Parks and outdoor recreation areas play a major role in promoting public health, livable communities, economic vitality, and conservation of our natural resources. Nebraska's outdoor recreation resources are invaluable assets to our public and those visiting the state, and we are pleased to provide recommendations on how to protect these resources for future generations. We hope that this planning document and its recommendations will better operate and manage our state's recreation resources and offer valuable insight to local communities and recreation professionals on how to accomplish this goal in the long-term interests of the people and the environment.

Sincerely,

James N. Douglas
Director
State Liaison Officer

TIME OUTDOORS IS TIME WELL SPENT

*OutdoorNebraska.org*

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*Fishing at Gavins Point at Lewis and Clark Lake. (Cedar County)*

*Picnicking at Indian Cave State Park. (Richardson County)*


CHAPTER 1

# Purpose of the SCORP

*Kayaking on Miller Creek at Lewis and Clark Lake State Recreation Area near Niobrara. (Knox County)*

## Introduction

Nebraskans have a history of hard work ethic and deserve to enjoy the outdoor recreation resources offered throughout the state in their leisure time, because Time Outdoors is Time Well Spent. With the rise of sedentary lifestyles, chronic health conditions, the onset of COVID-19 and the economic hardships that have ensued, the need to provide quality, affordable outdoor recreational opportunities that meet the demands of the public has never been greater.

The Nebraska State Comprehensive Outdoor Recreation Plan (SCORP) is a document required by the National Park Service (NPS) for the State to receive funding from the Land and Water Conservation Fund (LWCF) State Assistance Program. LWCF is a federal program established in 1965 that provides grant funds to states, counties and municipalities for outdoor recreation related planning, acquisitions and developments. States are required to update and submit the SCORP to the NPS for approval every five years to maintain eligibility of these funds. The SCORP sets priorities for LWCF funding based on sound planning principles for the evaluation of funding grant requests.

## History of the Land and Water Conservation Fund Program

In 1961, the Outdoor Recreation Resources Review Commission reported key elements for an effort to make outdoor recreation opportunities available to the general public. Based largely on the major recommendations, President Kennedy proposed legislation in February 1962 that would establish a "Land and Water Conservation Fund" to assist states in planning, acquisition and development of recreation resources and to finance new federal recreation lands.

With bipartisan support in both Houses of Congress, the bill was passed and signed into law on September 3, 1964, as Public Law 88-578, 16 U.S.C. 460/-4. The Land and Water Conservation Fund Act of 1965 was created with the following purpose:

*"The purposes of this part are to assist in preserving, developing, and assuring accessibility to all citizens of the United States of America of present and future generations and visitors who are lawfully present within the boundaries of the United States of America such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to strengthen the health and vitality of the citizens of the United States by: (1) providing funds for and authorizing Federal assistance to the States in planning, acquisition, and development of needed land and water areas and facilities and; (2) providing funds for the Federal acquisition and development of certain lands and other areas."*

Funding for the Land and Water Conservation Fund program is based on the principle that when the federal government sells the finite, irreplaceable Outer Continental Shelf (OCS) resources, a portion of the proceeds from the sale should be reinvested into open space and recreational opportunities all people need. While the majority of funding is derived from OCS mineral leasing receipts, it is supplemented with the sale of surplus federal property, motorboat fuel taxes, and fees for recreational use of federal lands.

*Boy holding a found white-tailed deer antler shed. (Wayne County)*

## Land and Water Conservation Fund State Assistance Program in Nebraska

*More than 1,000 LWCF projects have been completed in Nebraska since inception of the program.*

The Land and Water Conservation Fund State Assistance Program has provided funding across Nebraska for 54 years. Federal contributions of more than $49 million have assisted community outdoor recreation projects that were matched by state and local sponsors. Sponsors are required to provide at least a 50% match of the total project cost, which has resulted in more than $98 million being invested in outdoor recreation projects in Nebraska.

The Nebraska Game and Parks Commission (NGPC) has been designated by the Nebraska Legislature to carry out the purpose and objectives of the LWCF Act on behalf of the State of Nebraska. Per Section §37-906, "Forty percent of the federal funds annually allocated to the State of Nebraska are hereby reallocated to state projects and sixty percent to the projects of political subdivisions." Annual funding requests are ranked using the Open Project Selection Process (OPSP) by an internal Game and Parks Commission committee. Staff recommendations are forwarded to the NGPC Board of Commissioners for approval to allocate the federal funds.

*Labor Day weekend trail ride. (Knox County)*

Goals of the stateside assistance program are to: (1) meet state and locally identified public outdoor recreation resource needs to strengthen the health and vitality of the American People; (2) increase the number of protected state and local outdoor recreation resources and to ensure their availability for public use in perpetuity; and (3) encourage sound planning and long-term partnerships to expand the quantity and to ensure the quality of needed state and local outdoor recreation resources.

Ensuring the grant assisted sites are added permanently to the national recreation estate is a legacy of the stateside assistance program. Section 6(f)(3) of the LWCF Act requires all grant-assisted areas be maintained perpetually in public outdoor recreation use or be replaced by lands of equal market value and recreational usefulness. This section of the LWCF Act guarantees the permanency of outdoor recreation sites across the country for future generations.

*Sand art at Lake McConaughy. (Keith County)*

## SCORP Regions

In order to properly evaluate the entire State of Nebraska and set goals and objectives for outdoor recreation across the state, this plan has divided the state into seven regions (Figure 1.1). These regions are representative of the different populations, geography, and unique landscapes that affect the needs for outdoor recreation development. Throughout this plan, much of the data regarding supply and demand will be broken down by region to look for differing trends and to better identify what is needed within the seven regions of the state.

**Figure 1.1: SCORP Regions**

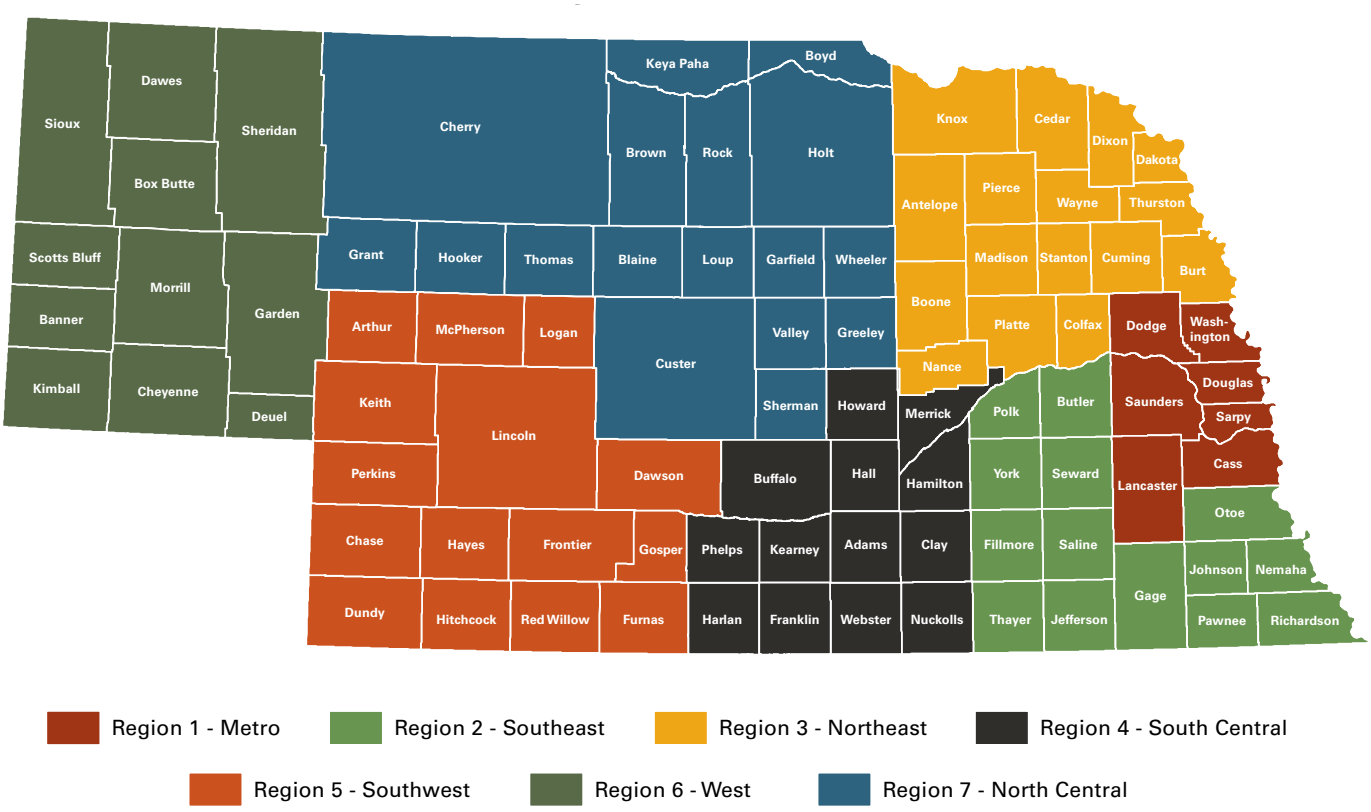


Table 1.1 shows the breakdown of funding per region for LWCF since its inception in 1965. It is important to note the breakdown of the LWCF monies per person in each region. The Metro region has received more than twice the funds of any other region, yet the amount per person is the least of all the regions given the higher population. Looking at the two different numbers together shows that the funding has been relatively well split up among the seven regions.

**Table 1.1: LWCF Grant Funding Breakdown of Nebraska Regions**

| Region | 2016 Population Estimate | LWCF Monies Received 1965-2016 |
|---|---|---|
| **1–Metro** | 1,120,846 | $17,304,582 |
| **2–Southeast** | 137,731 | $5,597,001 |
| **3–Northeast** | 182,675 | $8,138,120 |
| **4–South Central** | 200,974 | $5,405,205 |
| **5–Southwest** | 102,480 | $4,015,479 |
| **6–West** | 86,794 | $3,431,648 |
| **7–North Central** | 49,759 | $2,495,298 |
| **Statewide Total** | **1,881,259** | **$49,894,199** |

*Source: Nebraska Game and Parks Commission; US Census Bureau*

## Purpose of the Plan

This plan is used to help guide the state, Natural Resource Districts (NRD), counties and communities in developing, improving, renovating, and acquiring land for outdoor recreational use across Nebraska. The plan characterizes the supply and demand for outdoor recreation opportunities, summarizes state and regional demographics, and provides guidance on how to proceed with future developments of park lands sustainably. The importance of partnerships and connecting the public with outdoor recreation also is explored.

*Information in this guide can assist communities in planning and prioritizing future outdoor recreation projects.*

The information in this plan can be used by communities and recreation professionals in Nebraska to help them achieve their recreation goals. The data can help show communities who their recreational users are, and the public participation components can guide them to better understand what their people want in their specific region compared to the state as a whole. Chapter 5, Guiding Success (Action Plan), provides examples of insightful ways community members can create spaces and opportunities to engage their citizens with the natural world. The success stories sprinkled throughout this plan show the variety of outdoor recreation efforts taking place within our beautiful state.

*Playing tennis at Harmon Park in Kearney. (Buffalo County)*

The Action Plan and goals for Nebraska discussed in Chapter 5 were created from the results of the outdoor recreation public participation elements within this plan. The Action Plan sets priorities for outdoor recreation in Nebraska and the Land and Water Conservation Fund to help communities fulfill their outdoor recreation projects.

Readers should consider the LWCF priority projects within the Action Plan, determine how the goals can be incorporated into their community, and use the information gathered from the surveys to make informed decisions about future outdoor recreation efforts. The hope is that this document is a starting place for readers to add additional elements to their community's recreational amenities and ways to start that process.

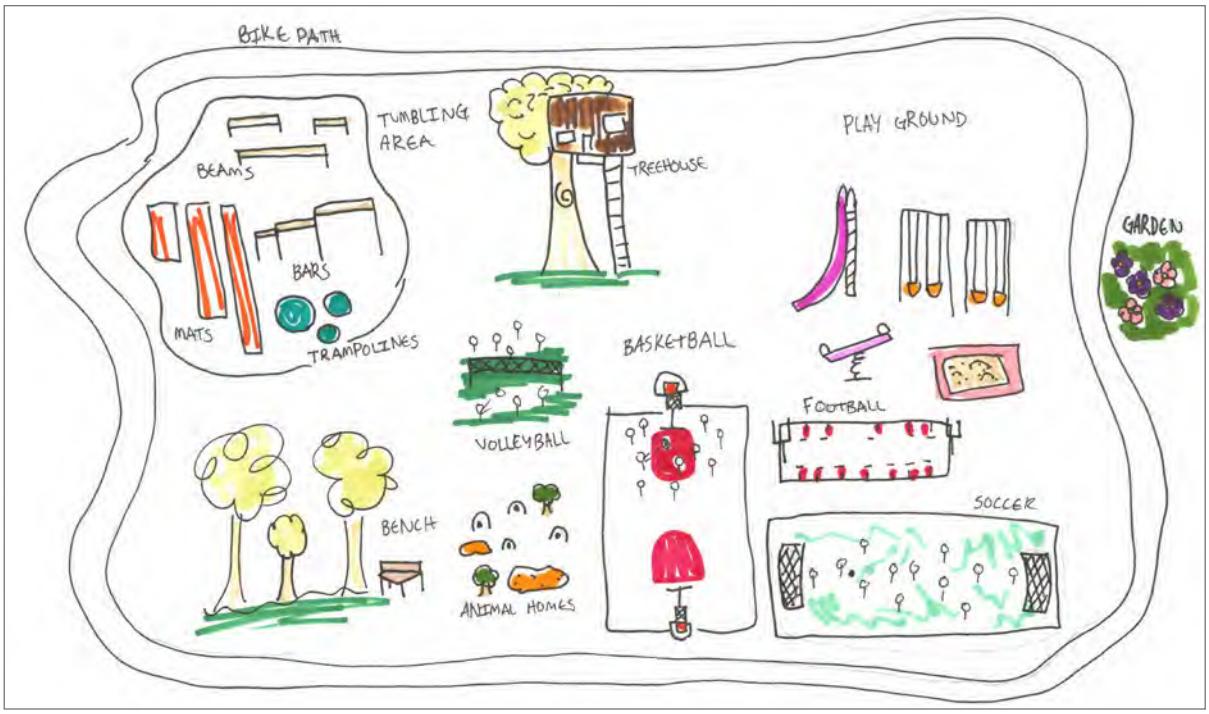
## Planning Process

The planning process for this SCORP began in 2018, with the collection and evaluation of demographic data, public outdoor recreation surveys, and input from the advisory committee. The SCORP planning process was executed by the NGPC Planning and Programming Division, with contributions from other divisions within NGPC and external constituents that participated in the advisory committee.

To begin the process of updating the plan, the NGPC contracted the Bureau of Sociological Research (BOSR) at the University of Nebraska-Lincoln to send an outdoor recreation survey to collect statistically-significant data from residents throughout the seven regions of the state regarding user experiences and preferences in public parks and recreational facilities.

Given that the generalized outdoor recreation survey targets permanent residents and most college students are away from their permanent residence a majority of the year, college students became a target audience to contact to garner input about their outdoor recreation preferences. This survey was sent to colleges and universities throughout the state in 2019. The findings for this survey are discussed in Chapter 4.

Furthermore, a couple of pilot projects were administered with youth in select areas throughout the state to capture their recreation needs and desires. The first activity involved an art project where students K-5 from multiple schools in Lincoln created their "Perfect Park Art." The second part of this pilot project was to send an outdoor recreation survey to hundreds of fourth and fifth graders in Nebraska to understand what youth use at parks and what they would like to see added in the future. Some examples of the student artwork and key findings from these public participation exercises are discussed in Chapter 4.




*Example of "Perfect Park Art" by a student.*

*Enjoying the fall colors on a walk at Eugene T. Mahoney State Park. (Cass County)*

The NGPC also sent an outdoor recreation questionnaire to every community within the state. The purpose of this survey was to quantify the supply of outdoor recreation in terms of acres and facilities provided by local communities; and to determine interest in community support for trending outdoor recreation opportunities such as zip-lining and rock climbing walls. This information will assist in finding deficiencies of land and facilities for outdoor recreation throughout the state, and is discussed in chapters 3 and 4 of this plan. The Open Project Selection Process (OPSP) also was updated during the SCORP planning process based on the Action Plan for Nebraska found in Chapter 5.

A SCORP Advisory Committee made up of community members, Natural Resources District (NRD) representatives and recreation professionals was formed and met twice during the SCORP planning process. The first meeting was in July 2019 to review the survey data we collected from our public participation exercises, gather input about success stories, learn about challenges each of the constituents have encountered when creating recreation spaces, and determine how to make the SCORP a more user-friendly document for communities and recreation professionals.

The purpose of the second meeting, hosted in March 2020, was to review and finalize the Action Plan for Nebraska. These public participation elements and advisory committee feedback helped shape the SCORP priority goals, objectives and suggested actions for future outdoor recreation and LWCF funding in Nebraska.

All committee members and select internal staff were given the opportunity to review the document prior to the plan being submitted to the Governor for comment and approval. The plan was then made available on our website for public comment. Once the comment period ended, the plan was submitted to the National Park Service for approval as the Nebraska State Comprehensive Outdoor Recreation Plan for 2021-2025.

# HOW-TO

## *Navigate This Guide*

*The compass and indicated color at the beginning of each chapter lets you know which chapter you are in and what's coming next.*


*Look for these icons in the margins to identify helpful tips and examples of outdoor recreation projects.*

### HOW-TO

*icons provide tips to help with your outdoor recreation planning needs.*

### DON'T FORGET!

*icons provide reminders as you travel through the recreation journey.*

### SUCCESS STORY

*icons identify successful outdoor recreation projects throughout the state.*


CHAPTER 2

# Demographics

*Fishing from a dock at Windmill State Recreation Area. (Buffalo County)*

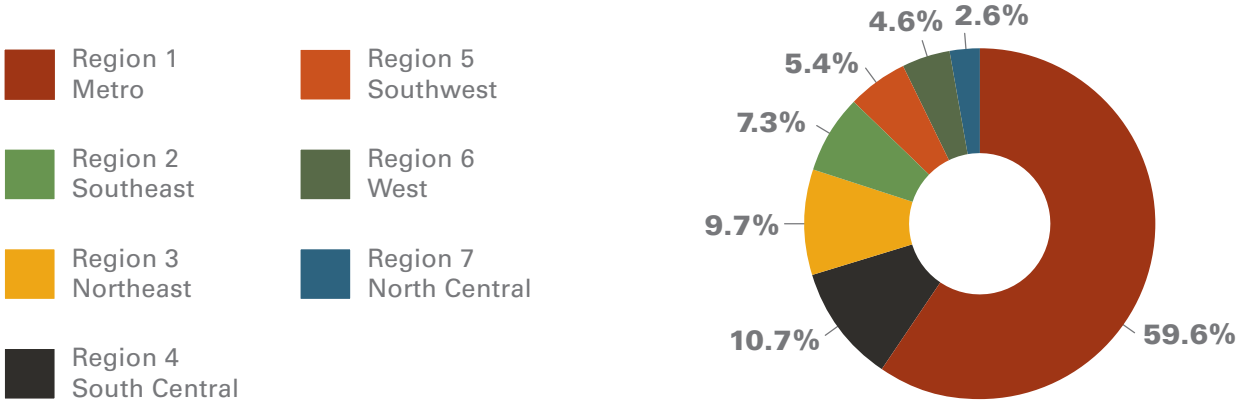
## Introduction

Demographics are measurable characteristics that assist in the understanding of recreational needs and wants of the population. This chapter looks at the population, age, race and ethnicity, sex, income, and education of Nebraskans. The demographics of Nebraska are presented statewide and broken down by region. Significant changes from previous SCORPs are noted within the text. This information should be used as a guide to respond to the changing needs and interests of Nebraskans.

Demographic information can be used to prioritize planning, prepare for the future and identify potential constraints on participation. For example, according to the 2011-2015 SCORP, over 20% of the Metro Region population was over age 55, with another 14% of the population joining that age group within the following ten years. In 2016, Pickleball courts were installed in Lincoln's Peterson Park to meet recreational needs of the senior community.

*See Lincoln's Pickleball success story on page 85.*

**Figure 2.1: Population Distribution**




*Swimming at the beach at Louisville State Recreation Area. (Cass County)*

*North Platte river near Lewellen. (Garden County)*

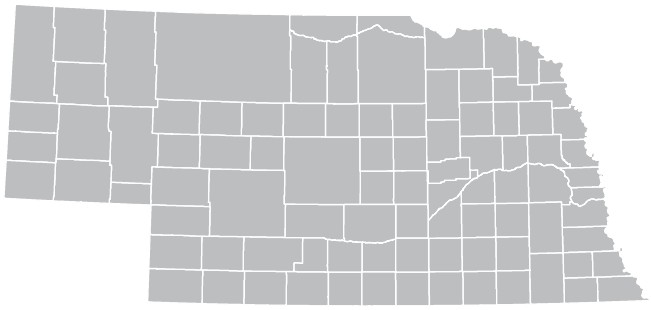
## Statewide

*Federal, state and private lands provide nearly one million acres of public access land for hunting, trapping and fishing.*

SCORP takes into account the changing demographic within our state by evaluating census data within each of the seven regions to help recreation planners and managers make informed decisions about their future outdoor recreation plans. Figure 2.2 shows Nebraska's statewide demographics. The racial-ethnic minority percentage of the state has almost doubled since the 2006-2010 SCORP and now sits just shy of 20%. Educational attainment beyond high school is continuing to increase across the state. Since the 2011-2015 SCORP, the increase has been from just over 58% to almost 64% of Nebraskans. According to the Census 2016 American Community Survey, the population of Nebraska is 1,881,259. This is an increase of more than 5% since the 2011-2015 SCORP. The population is split almost exactly in half between male and female, which is also consistent throughout the state.

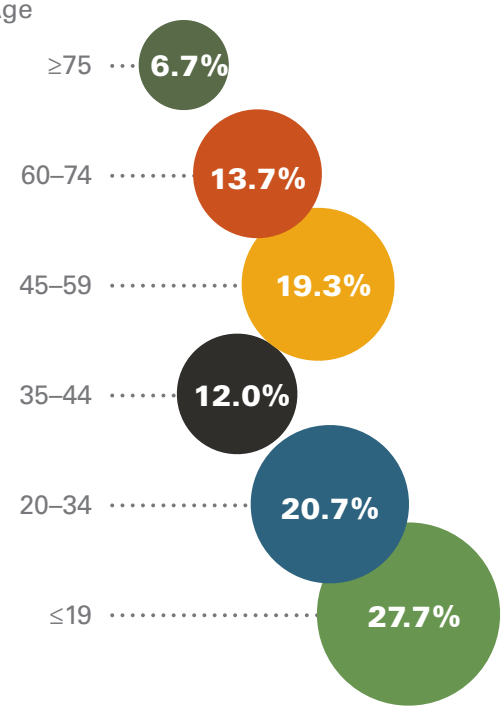
Ecologically, the Nebraska landscape provides an array of outdoor recreation opportunities. There are more miles of river than any other state. Federal, state and private lands provide nearly one million acres of public access land for hunting, trapping and fishing. Prairies, sandhills, ridges, bluffs and forests are all part of Nebraska. The biologically unique landscapes of Nebraska are fascinating because they provide so much to explore and discover!

**Figure 2.2: Statewide Demographics**

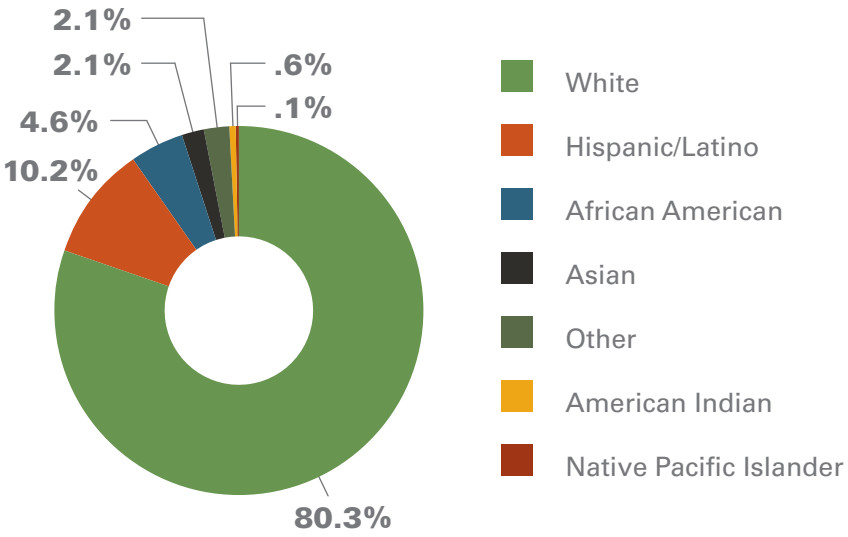


Total Population: **1,881,259**

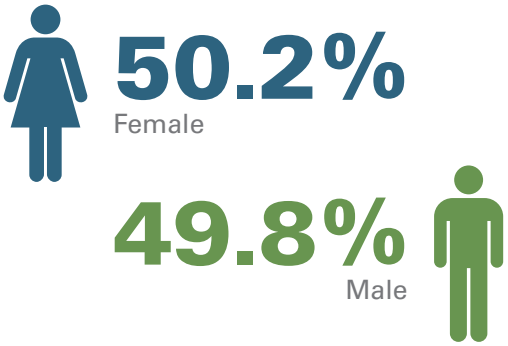
Age



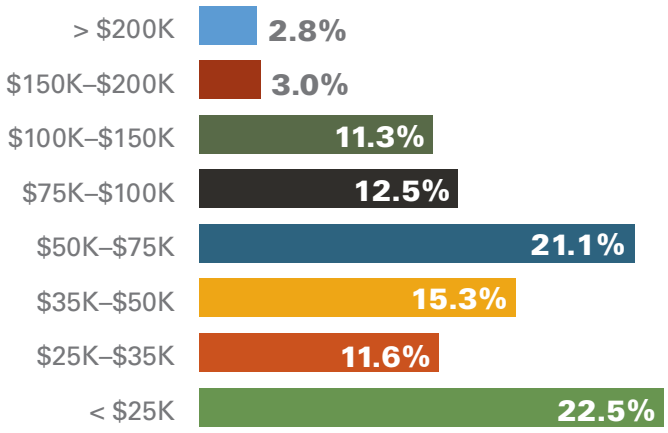

Race and Ethnicity



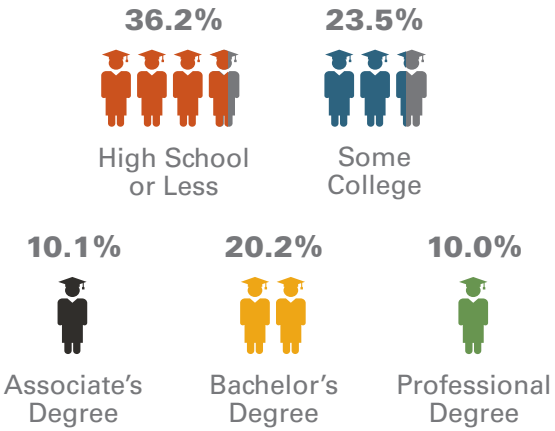

Sex




Average Annual Household Income




Education



## Region 1

*The Metro Region contains almost 60% of Nebraskans, of which almost 30% are 19 years of age or younger.*

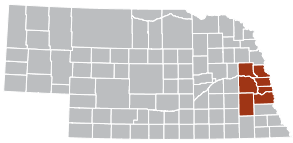
Figure 2.3 illustrates the demographics within the Metro Region, which is the most urban of our regions and contains almost 60% of Nebraskans. It is also the most diverse part of our state. The people of this region have amazing outdoor recreation opportunities practically in their backyard. Some include Nebraska's Outdoor Venture Parks, Omaha's Henry Doorly Zoo & Aquarium, and the Lee G. Simmons Conservation Park & Wildlife Safari. Geographically, the Metro region is bordered on the east by the Missouri River and bisected by the Platte River. Both, along with the Elkhorn River, provide numerous aquatic-related recreation opportunities. This region contains unique features such as the Salt Valley lakes, saline wetlands, DeSoto National Wildlife Refuge, and several biologically unique landscapes which can provide an array of recreation and educational opportunities.

Recreational planning for Nebraskans in this region should take into account the dense population, of which almost 30% are 19 years of age or younger, and the racial-ethnic diversity of the Omaha/Lincoln metro area, without disregarding the surrounding rural areas. Densely populated areas tend to have less green space, and as a result, higher prices associated with recreation. Understanding what the diverse population in this region wants in its outdoor recreation will help ensure that the economic value of the recreation offered meets their needs. Eighty-seven percent of the Metro Region's population lives within Douglas, Sarpy and Lancaster counties. Almost 70% of adults have had educational opportunities beyond high school, and the average yearly household income is highest in this region of the state with 59% of households at $50,000 or above. This could be due to a higher cost of living and subsequently a higher hourly wage for certain professions compared to rural areas.

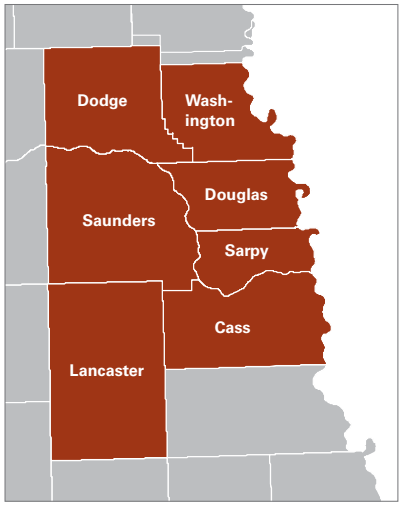
*Henry Doorly Zoo in Omaha. (Douglas County)*

*Go Ape ropes course at Eugene T. Mahoney State Park. (Cass County)*

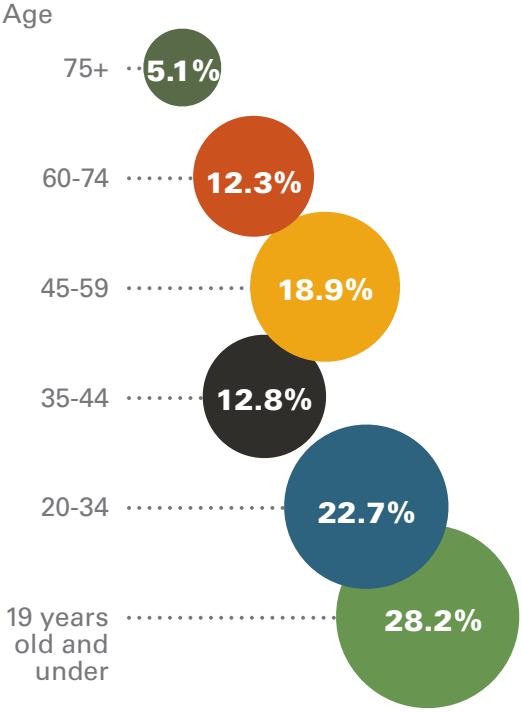
**Figure 2.3: Region 1 – Metro Demographics**



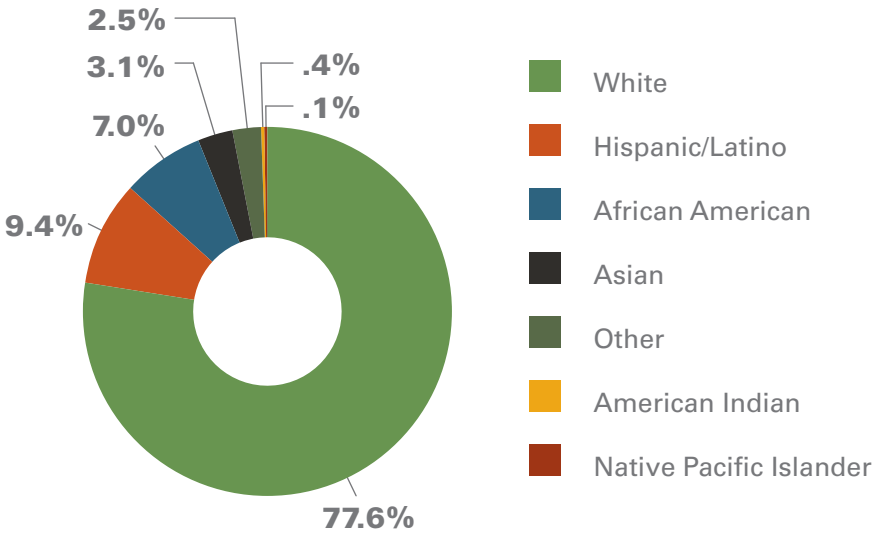
Percent of Population:
**59.6%**



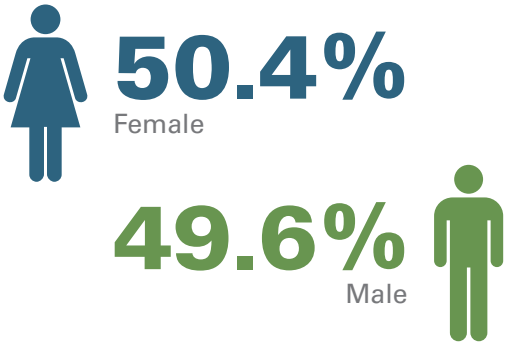

Age



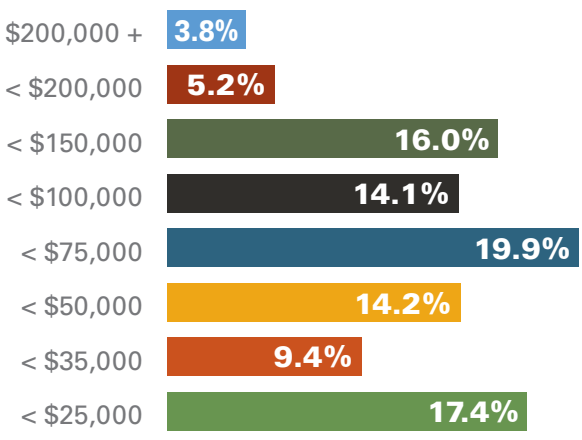

Race and Ethnicity



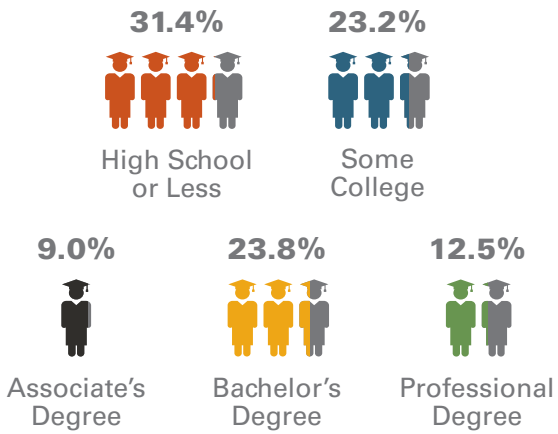

Sex




Average Annual Household Income




Education



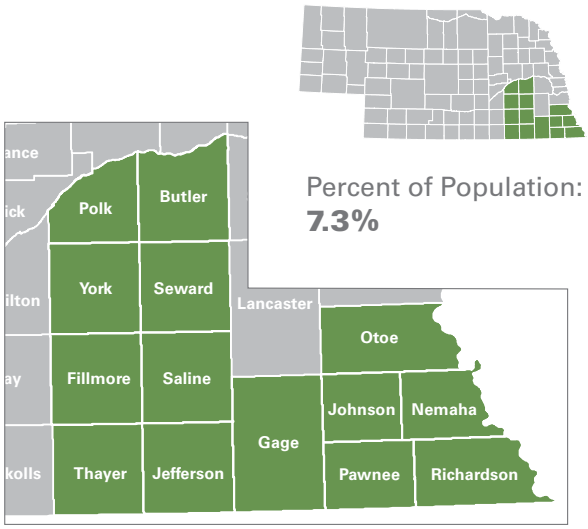
## Region 2

The boot-shaped Southeast Region depicted in Figure 2.4 contains just over 7% of Nebraskans within 14 counties. Sixty percent of these Nebraskans live in just five of the 14 counties, which are Gage, Otoe, Saline, Seward and York. The Platte River shapes the northernmost edge of this region and the Missouri River shapes the east. The lowest elevation point in Nebraska, of 840 feet, is in the southeast corner of Richardson County. Wooded bluffs can be found on the eastern side of this region, which then open to rolling hills, farmland, and tallgrass prairie to the west. In addition to state recreation areas and parks, the Southeast Region is home to Homestead National Monument and many recreation and park areas managed by NRDs and local communities.

The population of Region 2 is older than the state average, with 47% of residents age 45 and older. Just over 55% have a level of educational attainment beyond high school, and 50% have an average household income of $50,000 or more. The Southeast is the least racially and ethnically diverse region after Region 7 with 91% of the residents being white. The proximity to the highly populated Metro region provides potential opportunity to attract visitors by developing outdoor recreation. To tap into this opportunity, communities in this region should consider the Metro region's demographics when planning for outdoor recreation.

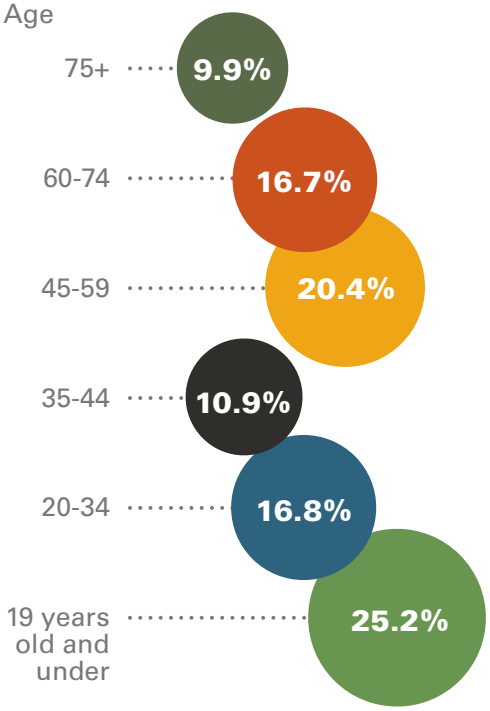

*Running in the Morel Mile, a fun run/walk event at Indian Cave State Park. (Richardson County)*

**Figure 2.4: Region 2 – Southeast Demographics**

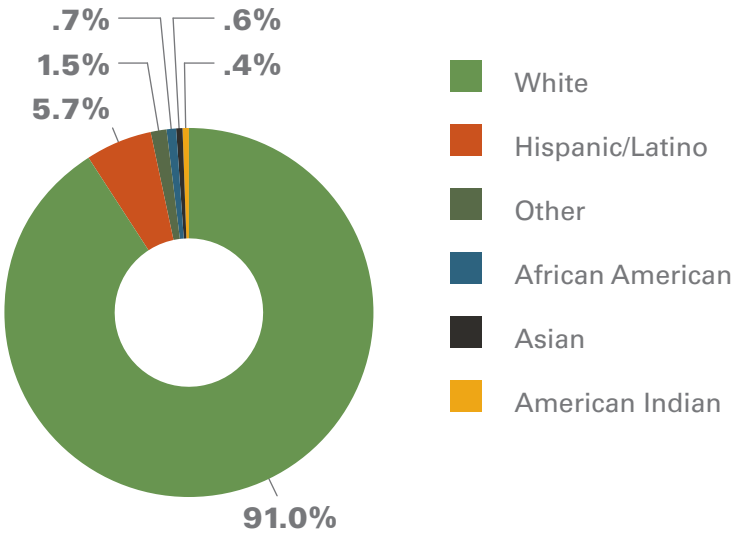



Percent of Population:
**7.3%**

Age




Race and Ethnicity

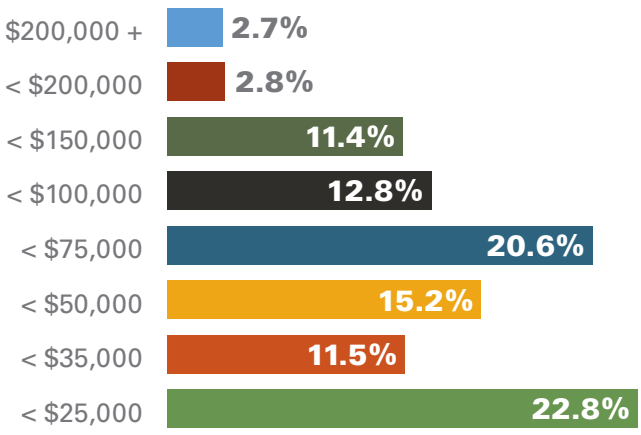



Sex

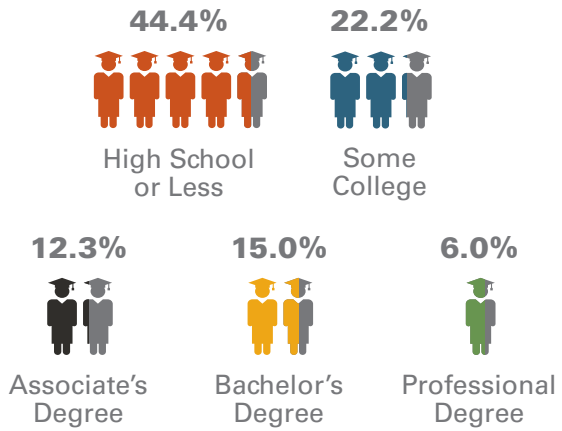
**49.9%** Female

**50.1%** Male

Average Annual Household Income




Education



*Camping and roasting hot dogs at Niobrara State Park. (Knox County)*

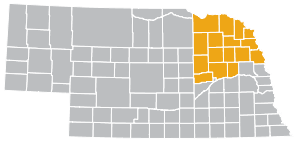
## Region 3

The Missouri River abuts the north and east boundary of the Northeast region shown in Figure 2.5. This span of river contains the only unchannelized portion of the Missouri River bordering Nebraska. It is also home to the endangered and threatened species scaleshell mussel. The 16 counties within this region extend south to the Platte River and over 100 miles west from the Missouri River. In addition to the recreational opportunities provided by these rivers, the Northeast contains Ashfall Fossil Beds State Historical Park, the eastern terminus of the Cowboy Trail, and the most wooded riparian areas of the state. Almost 10% of Nebraskans live in this region and are slightly older than the state average. The average household income is in line with the state average, about $50,000. Forty-eight percent of the population live in the counties containing the cities of Norfolk, Columbus and South Sioux City.

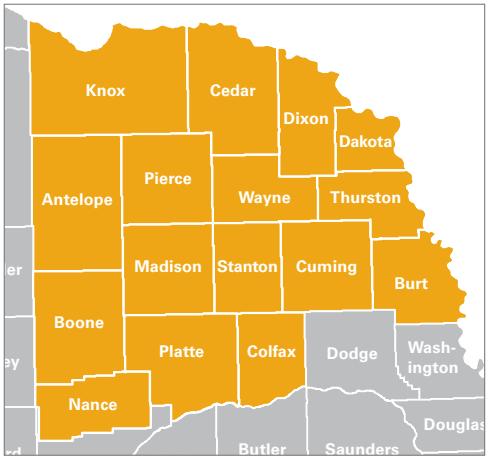
*The Missouri National Recreational River located in Region 3 includes one of only two stretches of the river between Montana and the mouth of the Missouri River that remain undammed or unchannelized.*

The Northeast region is second only to the Metro region in racial-ethnic diversity. It has the largest percentage of Hispanic and Latino Nebraskans in the state. The Northeast is home to two Native American reservations and the state's largest population of American Indians. Both of these groups have grown since the 2016-2020 SCORP. The racial-ethnic diversity and geographic locations of the population should be taken into consideration when planning outdoor recreation opportunities for this area. Culturally focused recreational experiences also should be considered.

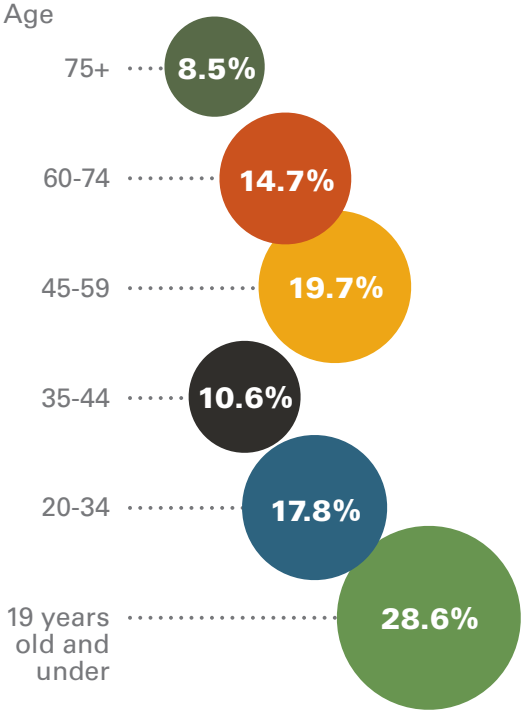
**Figure 2.5: Region 3 – Northeast Demographics**



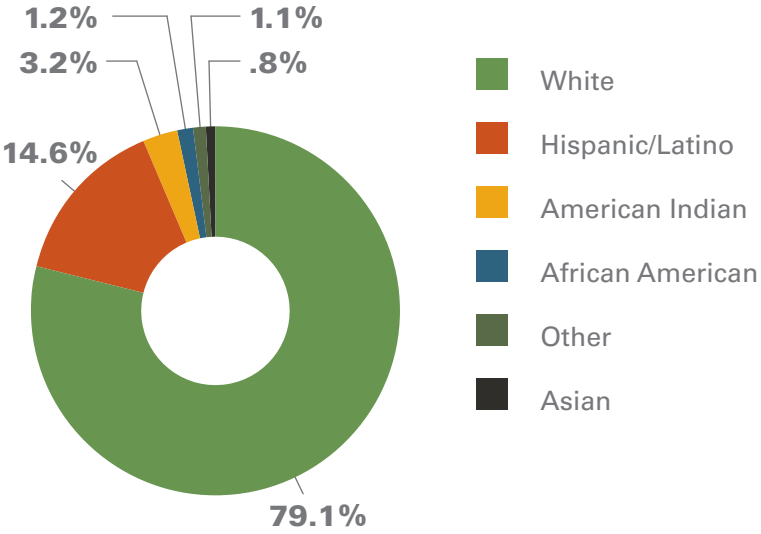
Percent of Population:
**9.7%**



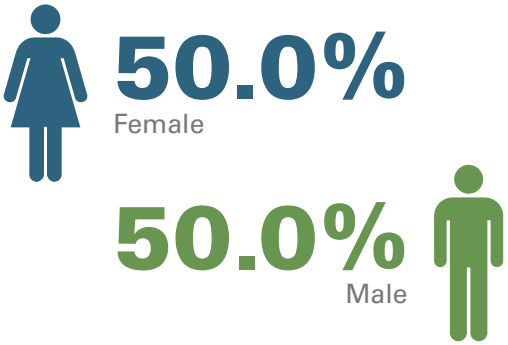

Age



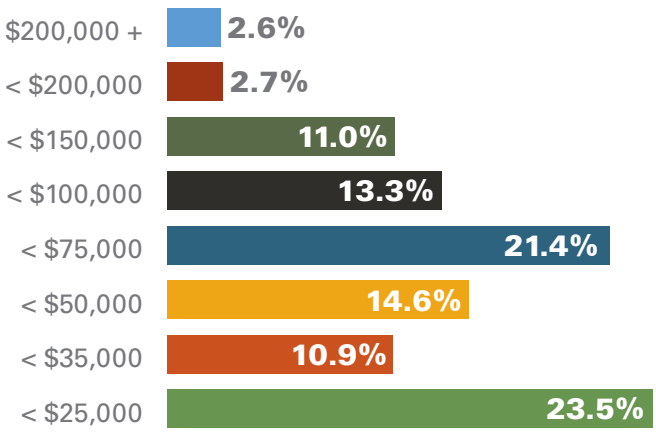

Race and Ethnicity



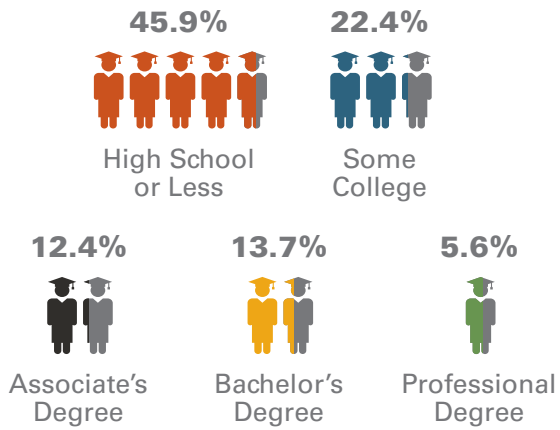

Sex




Average Annual Household Income




Education



*Walking and exploring the Outdoor Discovery Program at Fort Kearny State Historical Park. (Kearney County)*

## Region 4

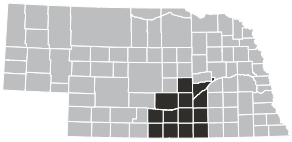
The South Central Region is well-known for the spring sandhill crane migration. Viewing opportunities draw visitors from around the world each year. The Central Platte River is a crucial stopover site for sandhill cranes and other migratory birds, making it an ideal place for wildlife viewing or hunting non-threatened and endangered waterfowl. The Platte, Republican, and Loup rivers flow within this region, providing kayaking, canoeing, boating, and fishing recreational opportunities. Figure 2.6 shows the population of the South Central Region is the largest next to the Metro Region, with 10.7% of Nebraskans. Seventy percent live in neighboring Buffalo, Hall, and Adams counties, which contain the three largest cities of the region, Kearney, Grand Island, and Hastings, respectively. Grand Island hosts the annual 11-day Nebraska State Fair. The 2019 fair brought in more than 283,000 attendees. Harlan County Reservoir is also located in this region offering one of the few family friendly ATV areas within Nebraska.

Nebraskans in the South Central Region are slightly older than the state average with 41.5% age 45 and older. Just over 58% of people in this region have a level of educational attainment beyond high school and 49% have an average household income below $50,000. The racial-ethnic minority of the population has increased by 1.6% since the last SCORP. Communities should capitalize on the increased diversity in this region by offering culturally relevant recreational opportunities.

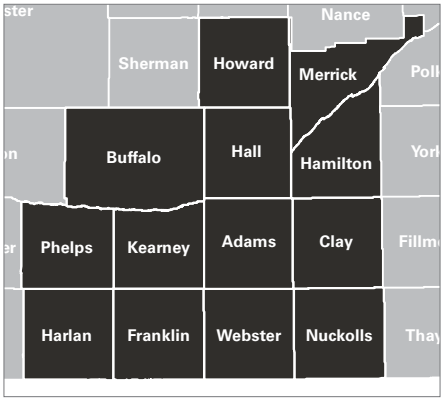
*Each year, visitors from around the world come to the South Central Region to witness the spring sandhill crane migration.*

*Watching and photographing sandhill cranes from the Fort Kearny Hike-Bike Trail. (Buffalo County)*

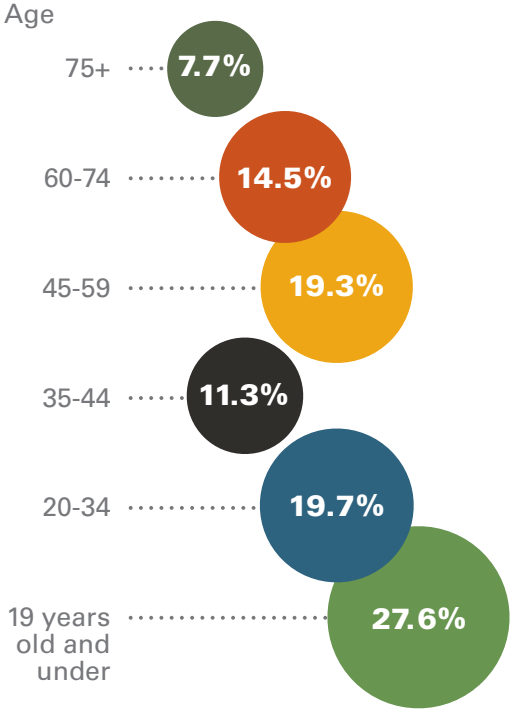
**Figure 2.6: Region 4 – South Central Demographics**



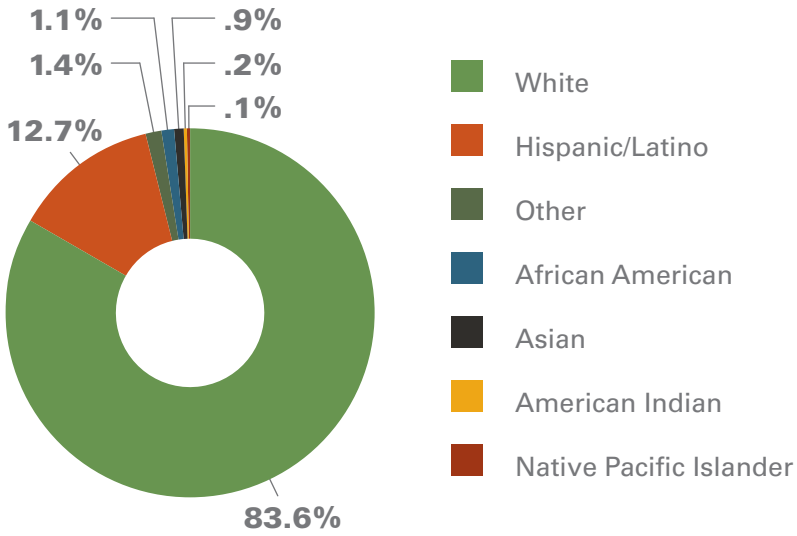
Percent of Population:
**10.7%**



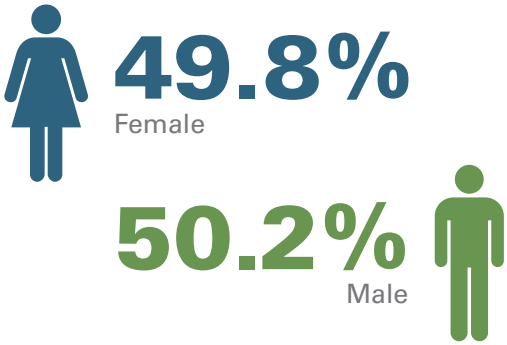

Age



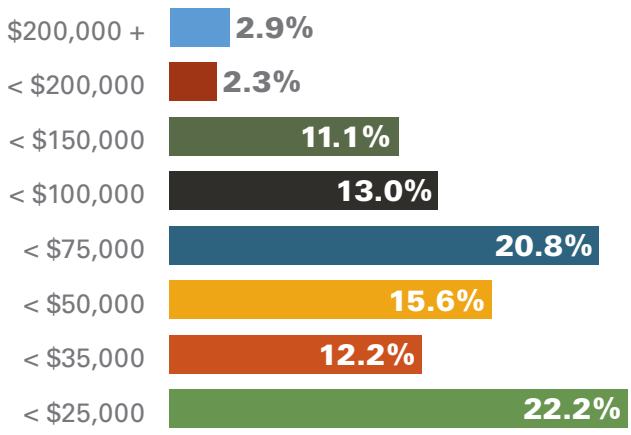

Race and Ethnicity



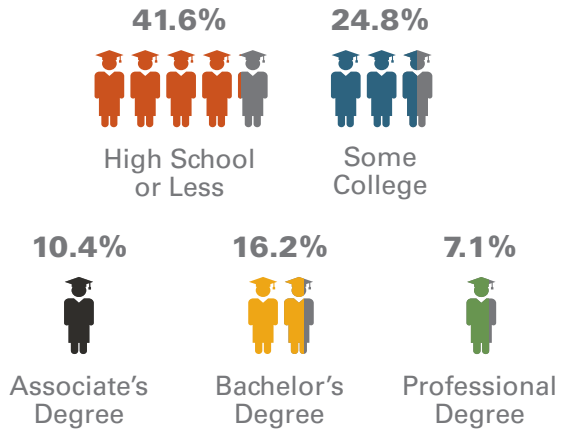

Sex




Average Annual Household Income




Education



## Region 5

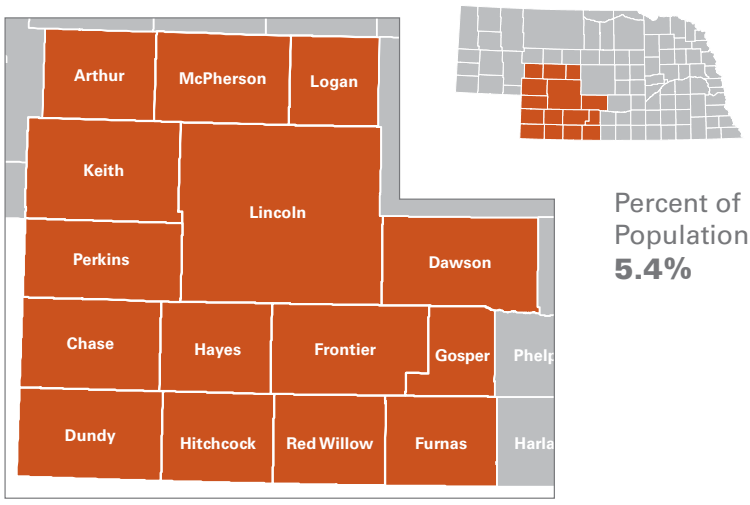
The Southwest region shown in Figure 2.7 borders Kansas to the south with mixed-grass prairie and Colorado to the west with sandsage prairie. The northern landscape contains the Sandhills and edge of the Dismal River headwaters. Also within this region is the Platte Confluence and Loess Canyons. This region comprises the third largest percentage of public access land for hunting, trapping and fishing at 21%. Pheasant hunting is one of many hunting opportunities in this region. The diverse land, state recreation areas, and biologically unique landscapes provide varied recreation opportunities on both land and water.

*Pheasant hunting at NCORPE south of North Platte. (Lincoln County)*

*The Southwest Region contains the third largest percentage of public access land for hunting, trapping and fishing.*

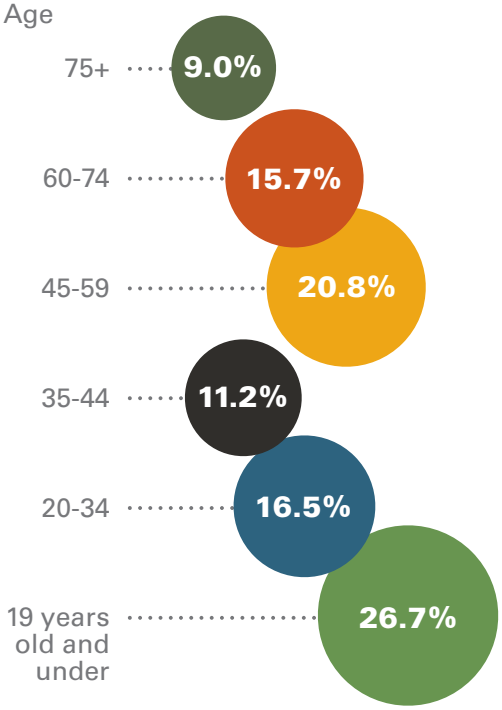
The largest cities in the Southwest are located along the I-80 corridor. Dawson and Lincoln counties are bisected by I-80 and are home to 58% of this region's population. The age range of Nebraskans in the Southwest has held steady since the last SCORP, with roughly half the population above and half below age 45. The racial-ethnic diversity has also not changed significantly. Educational attainment beyond high school for Nebraskans in this region has increased by just over 2% between the 2011-2015 and 2016-2020 SCORPs and again between 2016-2020 and 2021-2025.

**Figure 2.7: Region 5 – Southwest Demographics**

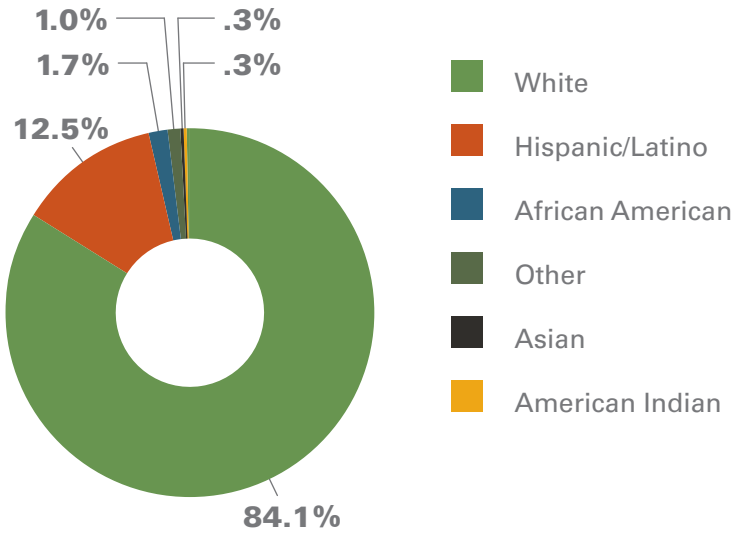



Percent of Population: **5.4%**

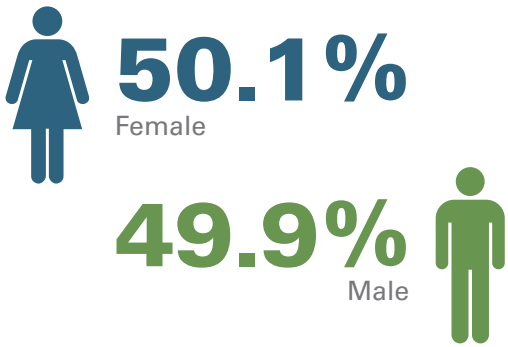
Age



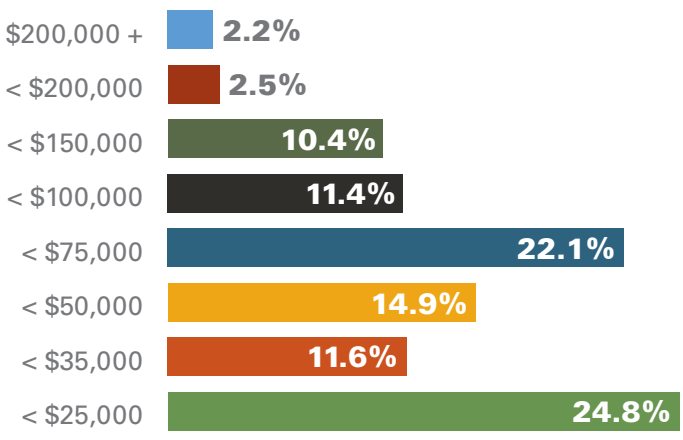

Race and Ethnicity



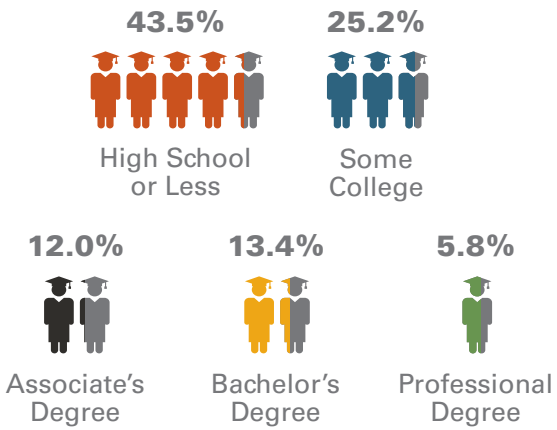

Sex




Average Annual Household Income




Education



*Field trip to Wildcat Hills Nature Center at Wildcat Hills State Recreation Area. (Scotts Bluff County)*

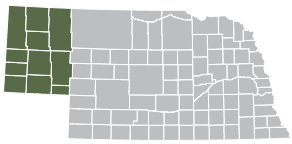
## Region 6

The West Panhandle Region is home to 4.6% of Nebraskans. Located on the western edge of the region and state, the county of Scotts Bluff contains 42% of this region's population. The demographics of the Panhandle have held steady from the previous two SCORPs. Over half of the population is under age 45. The racial-ethnic minority is in line with the state average at 19.2%. Educational attainment beyond high school is 61.5%, which is a 7% increase since the 2011-2015 SCORP.

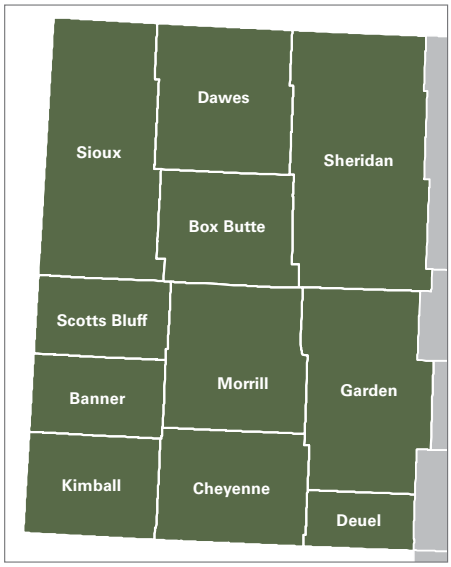
Region 6 is home to a diverse array of landscapes that provide significant nature-based recreation opportunities. To the north is the Oglala National Grassland. Moving south are the Pine Ridge, Upper Niobrara River, Toadstool Geologic Park, and the Sandhills alkaline lakes. The Sandhills alkaline lakes are vital for nesting and migration of shorebirds and other waterbirds, and are the largest alkaline wetland system in the state. The southern half of the region contains the North Platte River, Wildcat Hills, Chimney Rock, and Kimball Grasslands. The highest point in the state, of 5,424 feet, is located in Kimball. Other notable areas include Fort Robinson State Park, the Nebraska National Forest, the western terminus of the Cowboy Trail, and Alliance's famous Carhenge.

*Fishing at Bridgeport State Recreation Area. (Morrill County)*

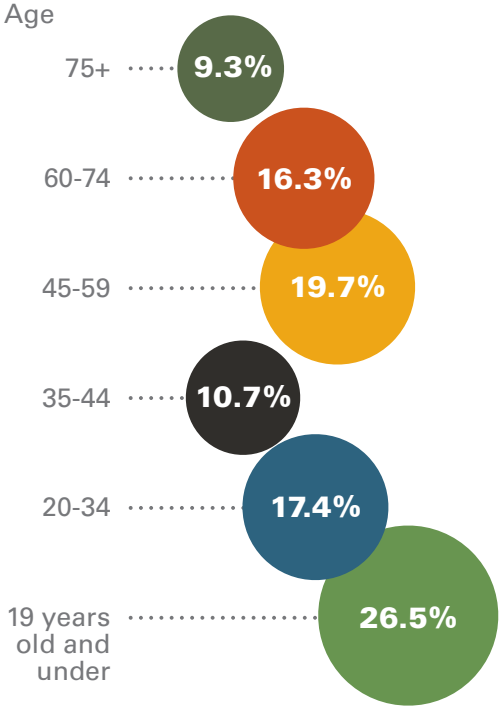
**Figure 2.8: Region 6 – West Demographics**



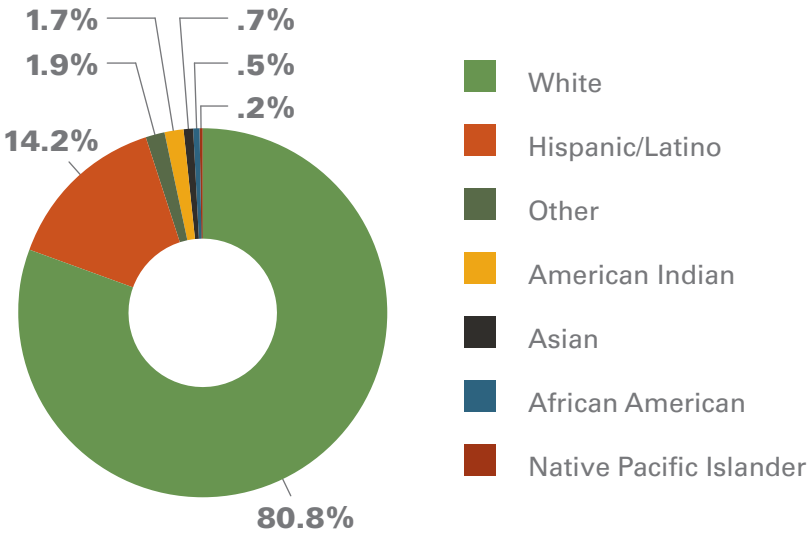
Percent of Population:
**4.6%**



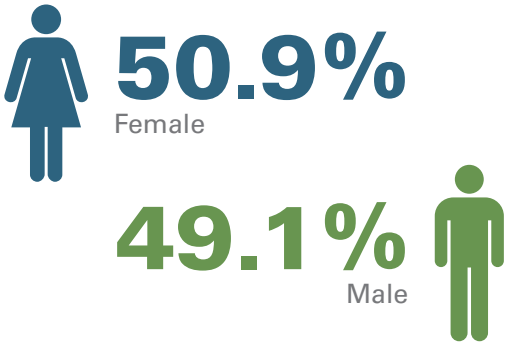

Age



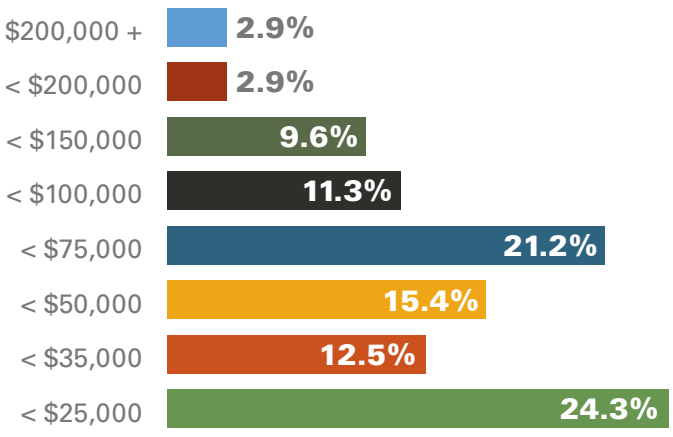

Race and Ethnicity



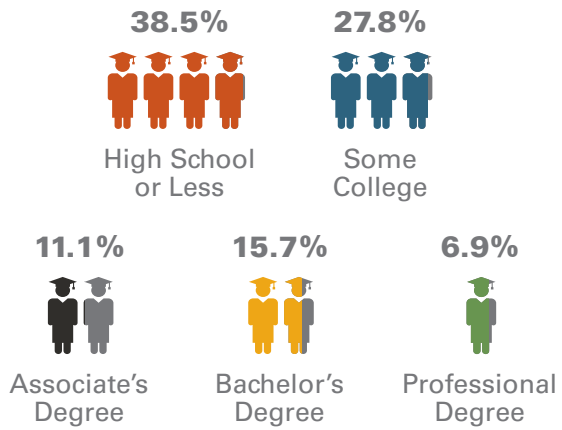

Sex




Average Annual Household Income




Education



## Region 7

Figure 2.9 illustrates the North Central Region, which encompasses 17 counties and is the least populated region of Nebraska, with 2.6% of the population. The age of Nebraskans in this region has fluctuated over the last two SCORP reports. The 2011-2015 SCORP reported 47% were under age 45. By the 2016-2020 report, those under age 45 made up 62.8%. The population is now growing older again with 48.6% under age 45. Recreation managers in this region should take into account the changing age demographic and provide opportunities that are in line with the preferences of the aging population. Educational attainment beyond high school is now just over 56%. This is an over 6% increase since the 2011-2015 SCORP. The average household income is the lowest in the state, with 52.8% of households making less than $50,000 per year, which could be due to a lower cost of living in this region.

The Niobrara National Scenic River, Upper Loup rivers, and the headwaters of both the Dismal and Elkhorn rivers are all within the North Central Region. These rivers provide excellent recreation opportunities. The large number of public access land acres also should be considered. Region 7 contains 31%, the largest percentage in the state, of Nebraska's public access land for hunting, trapping and fishing. The Cherry County wetlands are home to many reptiles, amphibians, and waterfowl that provide opportunity for wildlife encounters. In addition, the wetlands support the federally and state threatened western prairie fringed orchid. This area has unique areas filled with flora and fauna that provide relaxing experiences.

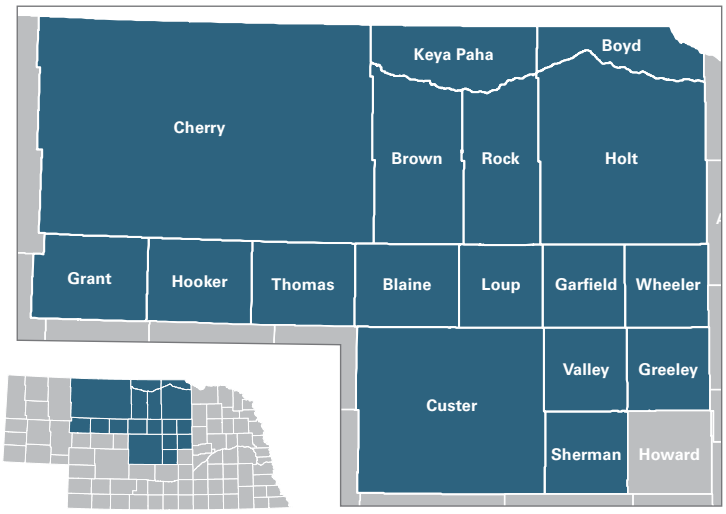
*Region 7 contains 31%, the largest percentage in the state, of Nebraska's public access land for hunting, trapping and fishing.*

*Duck and goose hunting off North Loup River near Taylor. (Loup County)*

## Conclusion

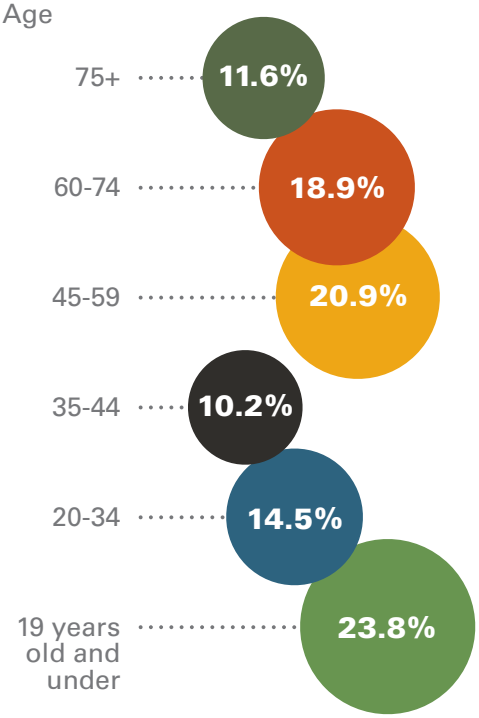
The data presented in this chapter should be used as a starting place in understanding community demographics since it was analyzed at a regional level. Providers of recreation should consider delving deeper into block level census data to understand unique aspects of community populations when determining how to serve those populations. The demographic breakdown of each of these regions pose unique opportunities and challenges that outdoor recreation planners must take into account as they look to the future, because as the population changes, so must the recreational opportunities that are provided.

**Figure 2.9: Region 7 – North Central Demographics**

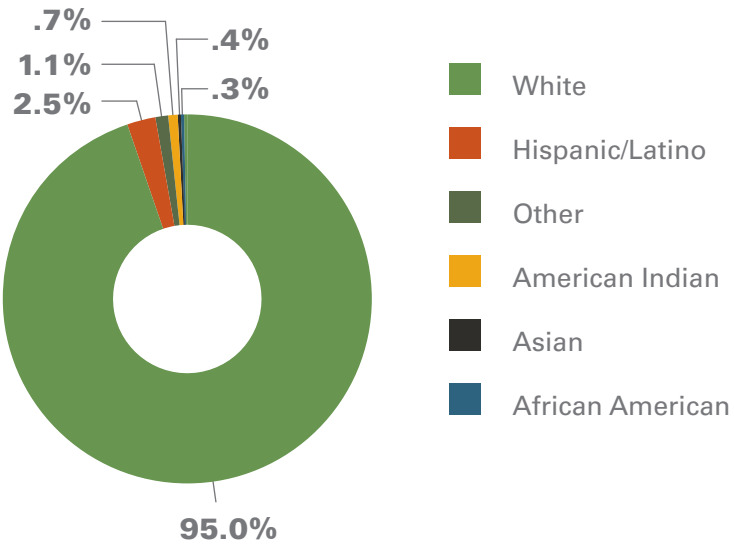



Percent of Population: **2.6%**

Age




Race and Ethnicity

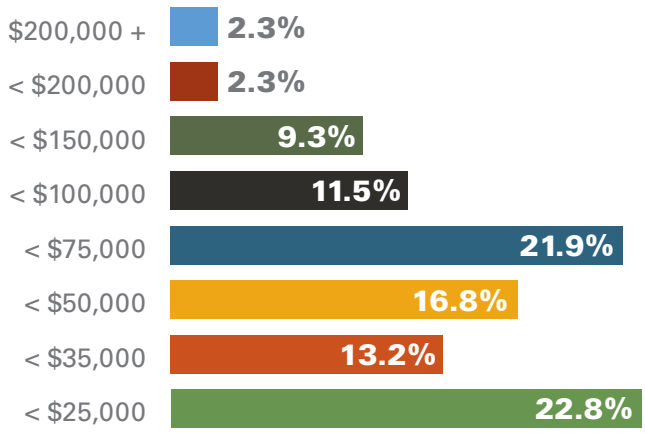



Sex

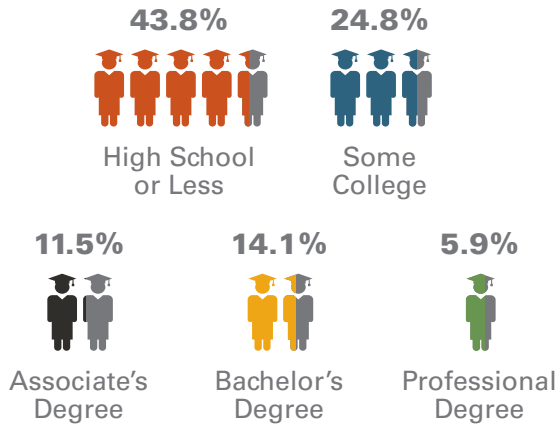
**50.4%** Female

**49.6%** Male

Average Annual Household Income




Education




CHAPTER 3

# Supply of Outdoor Recreation

*Pheasant and quail hunting at Olive Creek State Recreation Area. (Lancaster County)*


*Run Wild event on the trails of Eugene T. Mahoney State Park. (Cass County)*

## Introduction

This chapter highlights the supply of outdoor recreation and major recreation providers in Nebraska including federal, state, and local agencies, communities, and nonprofit and private providers. Collectively, these providers play unique and vital roles in supporting diverse outdoor recreation experiences, which account for much of the supply of recreation within the state. Although it is impossible to include every single provider in the state, significant providers that affect recreation statewide are described in this chapter.

Nebraska has more than one million acres of land and water available to the public for outdoor recreation. Additionally, there are thousands of privately owned acres available for hunting and wildlife viewing. The parks in Nebraska provide an array of uses for recreation, and the providers of outdoor recreation have done an excellent job capitalizing on the wild places and things to do. For example, communities offer events like fairs, festivals, and sports tournaments in their park areas to encourage outdoor play.

*See page 37 for information on the Public Access Atlas and hunting and wildlife viewing opportunities.*

Depending on what type of recreation the user is looking for and how communities plan to provide those recreational opportunities, a number of options are available in Nebraska. There are wildlife viewing areas in the Rainwater Basin central flyway zone in public and private ownership; and serene campgrounds that offer unique experiences throughout the state. Kayaking or canoeing down a river, primitive camping in the bluffs, kite sailing on a lake, hiking in remote forests, cross-country skiing in the north, mountain biking through ravines and hills, or horseback-riding through thousands of acres of parkland are just a few other examples of the outdoor recreation experiences Nebraska has to offer for all ages and abilities.

This chapter will not only discuss the providers of outdoor recreation, but delve deeper into the amenities provided by communities and the role wetlands can play in outdoor recreation.

## Providers of Outdoor Recreation Lands

The descriptions below help illustrate the unique roles each provider plays in outdoor recreation and the overlap among the types of recreation they provide in Nebraska.

*Baseball game in Tranquility Park in Omaha. (Douglas County)*

*Many private and public entities provide opportunities to recreate in Nebraska.*

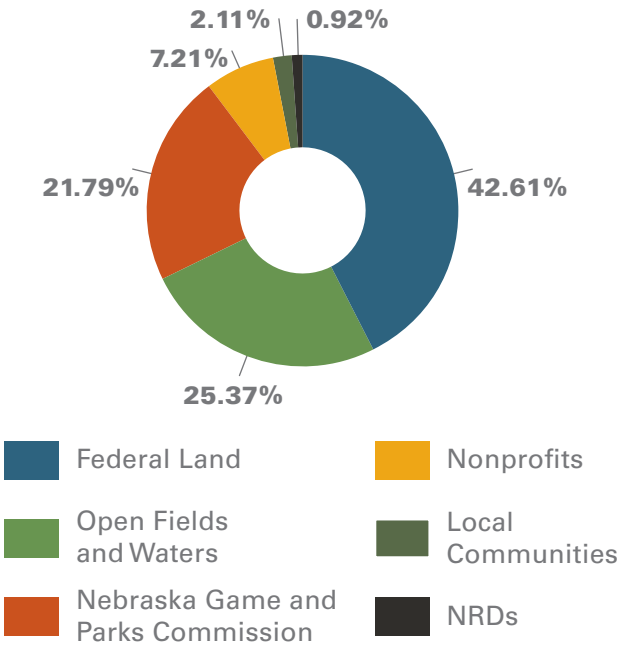
- **Federal:** National forests, national wildlife refuges, national scenic and recreational rivers, national grasslands, national monuments, lakes, and reservoirs.
- **State:** State parks, state recreation areas, state historical parks and sites, state recreational trails, state fish hatcheries, and state wildlife management areas; areas owned or managed by Nebraska Game and Parks Commission (NGPC).
- **Natural Resource Districts:** Recreational areas as part of reservoir projects and several regional trails.
- **Community:** A variety of parks, trails, open lands and outdoor recreational facilities, managed by municipalities.
- **Schools:** Playgrounds, athletic fields, walking tracks, and other facilities available for community use. It is difficult to quantify the number of outdoor recreational opportunities afforded to the citizens of Nebraska in regards to public and private school lands. The data in Figure 3.1 includes information from colleges across the state and some Nebraska public and private schools for primary and secondary education, but is not a complete picture of what is available.
- **Nonprofit:** Youth camps; equestrian facilities; hunting, fishing and related areas; preserves and prairies that are selectively available to the public.
- **Open Fields and Waters (OFW):** Privately owned areas that allow hunting, fishing, trapping and wildlife viewing and are maintained primarily for wildlife habitat and ecological restoration.

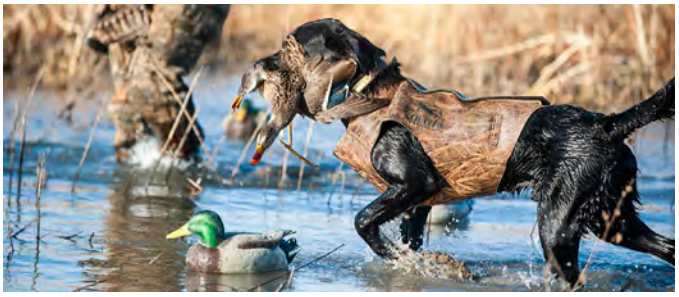
## Public Recreation

Nebraska encompasses 49,506,368 acres, of which 1,221,555, or 2.5%, is open to the public for some form of outdoor recreation. Figure 3.1 shows the percentage of recreation offered by different public entities in Nebraska. It's important to note that this breakdown does not include public school property. Few schools keep track of the amount of acreage they offer for recreation; therefore, this information was left out of this data. However, within communities, school lands are often used for outdoor recreation, and at times, are some of the only options available to the public for recreation, so they do offer a great resource to communities.

Figure 3.1 shows a majority of the public land available in Nebraska is federal land or land that is part of the OFW program. The OFW program was initiated to increase public access opportunities on private lands through contracts with landowners. OFW is a voluntary program that offers financial incentives to landowners willing to allow public walk-in access for hunting, trapping, and/or fishing. OFW areas offer opportunities for these specific types of recreation; however, other land available for recreation may not offer these opportunities, so it's important to always be aware of the types of recreation available on different public lands. If communities are looking for ways to increase hunting, trapping, and angling opportunities, they may want to consider promoting the OFW program to their citizens.

**Figure 3.1: Providers of Public Recreation Lands**



*Duck hunting at Langdon Bend Wildlife Management Area. (Nemaha County)*

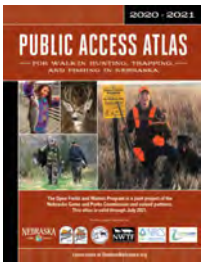
Communities also should remember that although OFW does offer some recreation opportunities, federal lands offer more with the wildlife refuges, national forests, and scenic rivers they own and maintain. Therefore, communities can benefit from federal lands near them and encourage citizens and tourists to participate in the recreation services and amenities offered.

The third largest public land provider is the Nebraska Game and Parks Commission, which owns or manages almost 22% of the available outdoor recreation land in the state. The nonprofits in Figure 3.1 make up around 7% of accessible lands to recreate. There are many nonprofits that do not offer public land to recreate, but have private land easements to preserve habitat and natural resources. This gives a good depiction of the recreational supply NGPC and nonprofits provide and the role they play in outdoor recreation and the preservation of our natural resources. Don't forget to check what type of recreation is available on the land before going out to recreate. Finally, local communities comprise about 2% of the supply of recreation in Nebraska. This may seem like a small percentage of the pie; however, it stresses the importance for communities to provide recreation amenities that meet the preferences of their people with the finite space they have dedicated to recreation.

## HOW-TO

### *Integrate Hunting and Fishing in Your Recreation Plan*

*The Public Access Atlas is a great resource for communities and recreation professionals to use because it identifies and consolidates access areas on public and private lands into one easy-to-read atlas written for hunters, trappers, and anglers. An interactive map can be accessed any time online for the most up-to-date information regarding lands to hunt, trap, or fish. Visit [OutdoorNebraska.org/PublicAccessAtlas](OutdoorNebraska.org/PublicAccessAtlas).*



## Private Recreation

As previously mentioned, approximately 97% of land in Nebraska is privately owned. Some privately owned properties provide recreation to the public for a fee. Some of these areas include campgrounds, golf courses, zoos, and hunting and fishing areas, but recreation is difficult to quantify for these areas. In addition, most private hunting and fishing areas are used for agricultural purposes or other recreational activities, making them difficult to track.

With this limitation in mind, before communities determine the private recreation activities or amenities to add to an area, participation rates and the supply of different types of recreation should be considered.

*Fly-fishing at Two Rivers State Recreation Area. (Douglas County)*

## Public Recreation Lands and Water

Data collection for the supply of recreation is an ongoing process and should be updated as frequently as possible. Through the community recreation questionnaire, NGPC is able to document the supply of outdoor recreation acres and park amenities within communities every five years. The information that was collected through these surveying efforts provides a picture of the supply of public land and water available for recreation in Nebraska.

Table 3.1 shows the total public recreational land and water acres available in Nebraska. It's important to note that the OFW acres are a snapshot in time of the acres available for hunting, trapping and angling in different regions as of April 2019. This number fluctuates throughout the year due to the contracts that are renewed or expire. Communities should take this into consideration when they're comparing totals of OFW acres in different regions. It does not show the acreage on the historical markers in the state because it was unavailable through History Nebraska at the time this SCORP was written. Other providers are included in Table 3.2 and broken down by the acres of public recreational lands and water in each SCORP region. Table 3.2 shows the land and water acres available per person in each region.

**Table 3.1: Total Public Recreational Lands and Water in Acres by Region**

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Region 7 | Total |
|---|---|---|---|---|---|---|---|---|
| **Federal** | 912 | 5,884 | 19,940 | 49,419 | 2,878 | 194,079 | 296,474 | **569,586** |
| **Nonprofit** | 1,120 | 517 | 229 | 1,612 | 5,634 | 18,586 | --- | **27,698** |
| **Regional** | 1,166 | 2,796 | 1,356 | 467 | --- | 1,307 | 304 | **7,396** |
| **State** | 23,680 | 30,482 | 26,827 | 12,236 | 76,782 | 43,857 | 53,817 | **267,681** |
| **Local** | 19,691 | 1,927 | 2,278 | 2,256 | 1,008 | 807 | 520 | **28,488** |
| **OFW** | 1,632 | 25,547 | 16,314 | 6,988 | 147,710 | 82,070 | 37,726 | **320,706** |
| **Total** | 48,201 | 67,153 | 66,944 | 72,978 | 234,012 | 340,706 | 388,841 | **1,221,555** |

*Source: Nebraska Game and Parks Commission 2020 surveys, Internet searches, personal contact, and existing data.*

In Table 3.1, Regions 6 and 7 have the greatest number of land and water in federal acres of any other region. These regions also have the smallest population. Alternatively, Region 1 has the least recreational acres available in the state, but it is the most populated area. Region 5 has the most state acres of any other region. This is because of the number and size of parks in the area, and the number of water acres and wildlife management areas.

The providers in each region are unique, and cultivate outdoor recreation settings for distinct types of recreation experiences. Therefore, providers should consider their market of users and preferences to accommodate the areas that do not provide recreation opportunities; and determine if those areas would benefit from diversifying the number and types of recreational options.

**Table 3.2: Public Recreational Lands and Water in Acres per Person in Nebraska**

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Region 7 | State |
|---|---|---|---|---|---|---|---|---|
| **Acres per person** | 0.042 | 0.487 | 0.367 | 0.363 | 2.283 | 3.925 | 7.814 | 0.649 |

*Source: Nebraska Game and Parks Commission 2020 surveys, Internet searches, personal contact, and existing data.*

When recreational lands and water acres are broken down per person by region, there are similar results to the amount of recreation in each region. Table 3.2 shows that people in Regions 6 and 7 have more recreational lands per person compared to Region 1, the more populated area. Regions 6 and 7 contain the national forests and large recreation areas, which encourage tourism and show off the magnificent lands and opportunities for visitors within and outside the state.

*Nebraska is full of biologically unique landscapes that offer varying opportunities to recreate.*

Region 1 has less green space, parks, and places to recreate given the large urban population. As a result, recreation comes at a higher cost of either utilizing the amenities offered within close proximity for a fee or traveling farther to recreate. Several communities are now requiring new developments to include parklands and/or park funding prior to approval of new residential developments. This is one of the ways communities have addressed the need to develop new recreational infrastructure in urban environments and increase the land and water acres per person in more densely populated areas. With the increase in LWCF funding with the Great American Outdoors Act, it will be critically important to consider alternative ways to increase the acres per person in areas that are currently far below other regions to narrow the gap.

*Biking through the RV campground at Lewis and Clark Lake State Recreation Area. (Knox County)*

Only Regions 5, 6 and 7 provide more than an acre per person of recreation, and these are the least populated areas with the largest amount of land and water acres available. These areas offer a lot of space for users looking to find solitude or just unplug and enjoy the wonderful scenery nature has to offer. From a tourism standpoint, communities should consider these unique aspects and use them to their advantage to market to specific users.

## Comparison of Data from 2016 to 2020

Comparing the results from 2016 and present, public recreational land and water acres can give a good idea of the trends occurring over time for each type of recreational provider. Overall, some regions of the state are losing recreation acres, whereas others are gaining them. Regions 2 through 5 gained land and water acres. Several factors may contribute to this, such as the shift in management within an area or providers adding additional acres to outdoor recreation as discussed above in the Public Recreation Lands and Water section.

*Jumping in the pool at Chadron State Park. (Dawes County)*

When comparing the number of acres per person to the last SCORP, subtle changes occurred in every region except Region 4. This is largely due to the additional federal acres in this region. Outdoor recreation enhances the quality of life for its users, such as providing areas of solitude and places to exercise, or the opportunity to bond with others that share similar interests; and it's clear that our federal providers see this as an important aspect to continue offering. The following sections will discuss community recreation trails, and the role wetlands play in outdoor recreation planning.

## Community Recreation

*Keeping an up-to-date inventory of recreational amenities in your community can help future planning efforts.*

It is also important to document the number and types of outdoor recreation amenities within communities to see how recreation is dispersed throughout the state, because these amenities can differ depending on the SCORP region. The Community Outdoor Recreation Questionnaire was sent to every community in the state to inventory the supply of outdoor recreation in terms of acres and facilities provided. Keep in mind that although every community was sent a survey, not every community returned one. NGPC did have an 87% return rate.

Table 3.3 shows the results of this analysis by region. First, it asked how many outdoor recreation acres exist within the community. Every region had over 1,000 acres except North Central and West, which could be due to fewer communities and smaller populations in these regions. For clarification, ballfields include baseball and softball fields, and sport courts include tennis, basketball, volleyball, and multipurpose courts.

Some of these regions do not have amenities that other regions possess, which could be due to funding or user preferences within those regions. For example, every region except North Central has at least one skateboard park. The North Central and Southwest regions do not have a water park, and the West region is the only region that doesn't have a splash pad. North Central is the only region without an archery range. Nonetheless, communities can use this table to help them identify what amenities their region has and how they compare to other regions in the state.

**Table 3.3: Community Park Amenities**

| Amenity | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Region 7 | Total |
|---|---|---|---|---|---|---|---|---|
| **Outdoor Acres** | 19,691 | 1,927 | 2,278 | 2,256 | 1,008 | 807 | 520 | **28,488** |
| **Parks** | 583 | 192 | 178 | 182 | 90 | 48 | 52 | **1,325** |
| **Picnic Shelters** | 349 | 208 | 209 | 163 | 113 | 31 | 72 | **1,145** |
| **Picnic Tables** | 2,091 | 1,459 | 2,242 | 1,378 | 920 | 325 | 439 | **8,854** |
| **Playgrounds** | 435 | 166 | 222 | 158 | 122 | 39 | 43 | **1,185** |
| **Restrooms** | 191 | 136 | 176 | 139 | 78 | 44 | 58 | **822** |
| **Ballfields** | 353 | 177 | 190 | 217 | 105 | 40 | 59 | **1,141** |
| **Soccer Fields** | 132 | 53 | 62 | 65 | 21 | 6 | 5 | **344** |
| **Sport Courts** | 539 | 187 | 261 | 211 | 117 | 57 | 66 | **1,438** |
| **Public Golf Courses** | 17 | 18 | 26 | 14 | 16 | 11 | 7 | **109** |
| **Disc Golf Courses** | 14 | 11 | 11 | 12 | 12 | 5 | 7 | **72** |
| **Climbing Walls** | 2 | 4 | 4 | 4 | 2 | 1 | 1 | **18** |
| **Skateboard Parks** | 6 | 6 | 2 | 5 | 5 | 1 | - | **25** |
| **Swimming Pools** | 45 | 25 | 37 | 31 | 26 | 13 | 13 | **190** |
| **Water Parks** | 2 | 6 | 5 | 4 | - | 1 | - | **18** |
| **Splash Pads** | 24 | 9 | 7 | 15 | 5 | - | 3 | **63** |
| **Horseshoe Pits** | 134 | 61 | 171 | 89 | 74 | 49 | 71 | **649** |
| **Camping Sites** | 198 | 391 | 544 | 161 | 140 | 28 | 184 | **1,646** |
| **Lake or Pond** | 2,356 | 104 | 385 | 13,224 | 105 | 92 | 29 | **16,295** |
| **Archery Range** | 1 | 2 | 4 | 2 | 3 | 1 | - | **13** |
| **Shooting Range** | 3 | 4 | 2 | 3 | 4 | 2 | 2 | **20** |

*Source: Nebraska Game and Parks Commission 2020 surveys, Internet searches, personal contact, and existing data.*

*Soccer practice at Elmwood Park in Omaha. (Douglas County)*

*Children play in the water at the splash pad at Memorial Park in North Platte. (Lincoln County)*

*One of the greatest treasures in our statewide Nebraska Trail System is the iconic Cowboy Trail, which spans from Norfolk to Chadron, covering 321 miles.*

*Biking on the Cowboy Trail. (Madison County)*

## Trails

### Statewide

Trails continue to be a highly ranked amenity by the public as a recreational opportunity in Nebraska. They're valuable to the public because they offer multiple uses. For example, a community may want to provide a trail to connect multiple parks, a nearby school, or natural corridor. Some communities may consider creating a trail in a dog park. Trails offer a way for the public to exercise, connect with nature and improve quality of life, among other recreational opportunities.

NGPC has an extensive network of trails that are made of different surfaces. The interactive trails map, available on NGPC's website, includes information about the types of trails offered, surface type, length and size of the trail, and the type of recreation allowed on the trail. NGPC is currently conducting inventory of water trails in the state to map the location of these trails for the public to have readily available data on the existing interactive trails map. This trails map interface will display over 650 miles of land trails and over 550 miles of water trails with access points, distance and surface type, trail heads, restrooms, and drinking fountains, among other features.

One of the greatest treasures in our statewide Nebraska trail system is the iconic Cowboy Trail, which covers 321 miles, connecting Norfolk to Chadron. The Cowboy Trail is the largest Rails-to-Trails project in the United States and offers many uses for the public such as hiking, biking, horseback riding, and wildlife viewing.

The communities along the Cowboy Trail have a unique opportunity to capitalize on when it comes to tourism and recreation along this trail. They should consider how they can connect and expand their trails, recreation amenities, and tourism opportunities for their residents and potential visitors.

Don't forget to consider the accessibility and wayfinding signage of the trail amenity you are offering. This is critically important for water trails.

## Community Trails

NGPC asked communities in our recreation questionnaire to document how many miles of different trail surfaces exist within their communities. Table 3.4 shows the miles of different types of surfacing for trails within each region of the state. Again, the Metro region has more miles of trails than any other region given the larger population. One reason is because urban areas are becoming more trail-centric because of the benefits associated with trails and quality of life. Trails and quality of life have a direct relationship with one another. User preferences show that there's a positive correlation among mental, physical, and social aspects of life in communities that have trails and connect people with outdoor recreation compared to those that do not. Even rural communities close to urban areas are focusing more on trail development as they can connect nearby amenities.

*Did you know that trails are tied to higher property values and opportunities for children to recreate safely?*

The Northeast and South Central regions follow the Metro region for the most trail miles. Concrete trails appear to be the most popular type of trail surface created in communities, followed by natural and limestone trails. Paved system trails create great connectivity to green spaces and parks; whereas, a properly planned and designed natural surface trail system could add to the recreational value immensely by providing unique experiences for hikers, runners, and mountain bikers. One idea could be to provide hard surface trails parallel to natural surface options to relieve pressure from the paved system and provide a richer experience for those looking to recreate on natural surfaced trails.

**Table 3.4: Community Trails in Miles**

| Type of Trail in Miles | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Region 7 | Total |
|---|---|---|---|---|---|---|---|---|
| **Concrete Trails** | 293.8 | 24.72 | 61.92 | 61.43 | 28.69 | 9.9 | 2.2 | **483** |
| **Asphalt Trails** | 8 | 0.85 | 0.8 | 4.25 | 5.4 | - | 1.2 | **21** |
| **Limestone Trails** | 32.99 | 4.25 | 10.75 | 22.5 | 5 | 0.5 | 6.6 | **83** |
| **Natural Trails** | 44 | 47.8 | 6 | 10 | 7.5 | 5.1 | 2.5 | **123** |
| **Water Trails** | - | - | 2.8 | 2.3 | 15 | - | - | **20** |
| **ATV/OHV Trails** | - | - | - | - | - | 1 | - | **1** |
| **Total Miles of Trail** | 382.34 | 78.42 | 81.37 | 79.2 | 52.84 | 14.4 | 10.5 | **699.07** |

*Source: Nebraska Game and Parks Commission 2020 surveys, Internet searches, personal contact, and existing data.*

Consider the type of trails your community wants. ATV trails and mountain biking trails are in high demand in some areas of the state, but there are few offered. The Recreational Trails Program (RTP) or LWCF grants are great opportunities for this (see Chapter 5 for details).

Communities can use this information as they plan to invest and procure funding for trails with surfacing that match the specific preference of the intended users. Surveying community members early on in the planning process can be beneficial when deciding to invest in a trail (or any outdoor recreation amenity) because it ensures a holistic approach is taken in making decisions that account for the intended user and the experience that they want to have.

## Wetlands and Outdoor Recreation

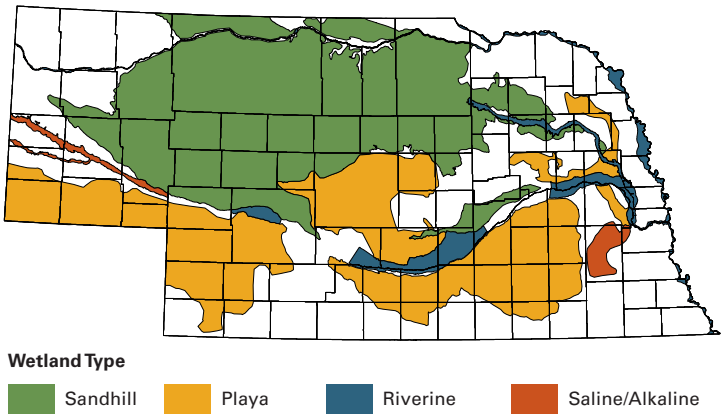
### What are wetlands?

The State of Nebraska has adopted the federal definition that wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation."

### Why are Nebraska wetlands unique?

Nebraska's wetland resources are unique because they're incredibly diverse and dynamic. Take a look at Figure 3.2 to determine the wetland complexes present in counties throughout the state.

**Figure 3.2: Wetland Complexes in Nebraska**




*Some wetlands hold water for only a few weeks or less during the spring, while others never go completely dry.*

They include marshes, lakes, river and stream backwaters, oxbows, wet meadows, fens, and seep areas. These wetlands vary greatly in nature and appearance due to physical features such as geographic location, water source and permanence, and chemical properties. Some wetlands hold water for only a few weeks or less during the spring, while others never go completely dry. Many wetlands receive their water from groundwater aquifers, while others are totally dependent on precipitation and runoff. The water chemistry of wetlands ranges from fresh to saline, and from acidic to basic. These descriptions identify the extreme variations of wetland characteristics. Nebraska's wetland resources possess these extremes and virtually every combination in between.

**Figure 3.3: Types of Wetlands**

**Nebraska has diverse wetlands across the state. There are many types of wetlands:**

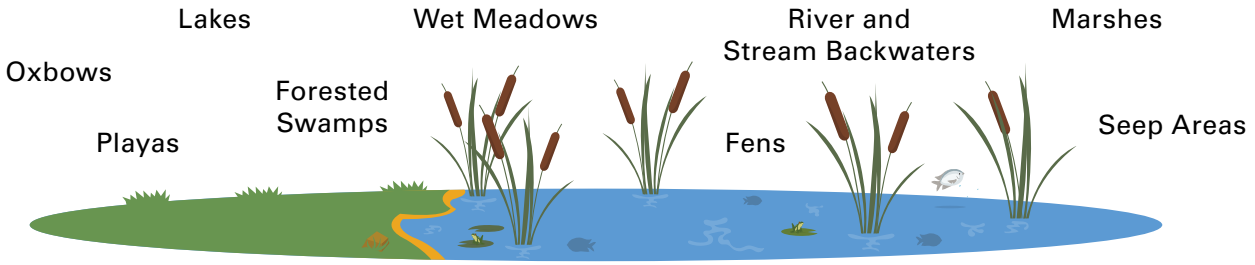
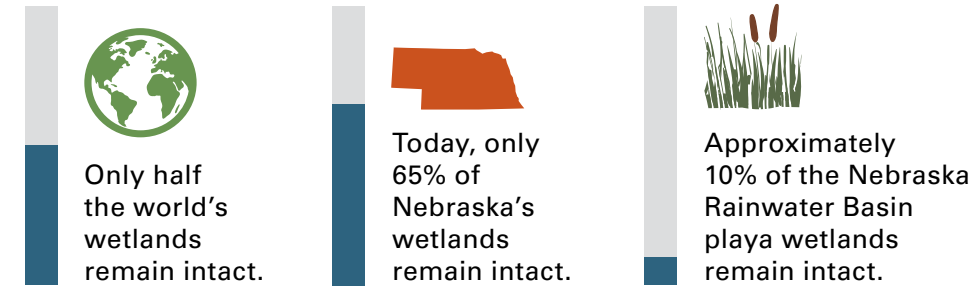


**Figure 3.4: Wetland Loss**

Over the past 250 years, wetlands have declined at an alarming rate, mostly due to land conversion.




*Don't forget to consider the role wetlands play in combating climate change.*

**Did you know?**

At the time of statehood in 1867, Nebraska contained an estimated 2,910,000 acres of wetlands. Wetlands have been affected directly by filling, ditching, tilling, digging concentration pits, channelization, and declining water tables, and indirectly by changes in the surrounding uplands that caused increased sedimentation or the diversion of surface runoff away from wetlands. Wetlands and water areas also were created in some regions due to the construction of farm and livestock ponds, and locally rising water tables due to irrigation canal and reservoir seepage. However, the net result of all of these activities statewide was a reduction in wetlands by an estimated 35%, to 1,905,000 acres. The destruction of wetlands was much higher in some regions of the state, reaching over a 90% loss, but the statewide figure is buffered by the large wetland resource still remaining in the Sandhills.

*Storm clouds loom over a wetland in the Sandhills on the Valentine National Wildlife Refuge. (Cherry County)*

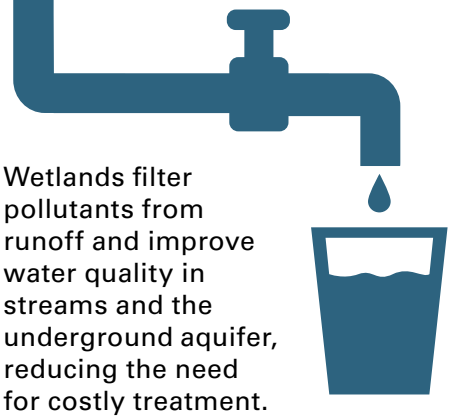
Figure 3.5: Reasons for Wetland Conservation

# Why should we conserve wetlands?

## Sufficient clean water

**95%**

of Nebraska drinking water comes from groundwater, which is naturally filtered by wetlands.



Wetlands filter pollutants from runoff and improve water quality in streams and the underground aquifer, reducing the need for costly treatment.

## Groundwater recharge

Many wetlands slowly release water into the ground to recharge groundwater. Sandhills and playa wetlands recharge a significant portion of the state's Ogallala Aquifer.

## Protection from disaster

Wetlands hold water, making flooding and soil erosion less likely.

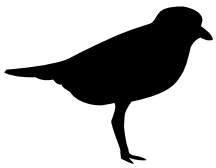
## Diverse wildlife

Nebraska is unique in that it possesses three major wetland complexes that are of international importance to wildlife.

**90%**

The Platte River provides roosting habitat for 90% of the continent's sandhill crane population.

Wetlands play an important role by providing habitat for threatened and endangered species.



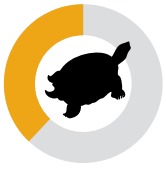
**70%**

of the state's threatened and endangered species, such as piping plovers and whooping cranes, depend on wetlands.

**Wetlands protect Nebraska species:**

**100%** of amphibians

**50%** of birds and plants



**38%** of reptiles

**36%** of mammals

## Outdoor Recreation in Wetlands

- **Outdoor classroom**
- **Self-guided interpretation**
- **Boardwalks**
- **Nature Trails**
- **Hunting**
- **Trapping**
- **Watchable wildlife**
- **Photographing flora and fauna**

## Revenue in tourism and hunting recreation

Streams and wetlands are major economic drivers because of their role in hunting, fishing, recreation, and agriculture.

In the Rainwater Basin landscape, every acre generates $20 in revenue.

**Why should we conserve wetlands?**

Wetlands should be conserved because they provide many benefits to humans, animals, and the environment as described in Figure 3.5. As part of the central flyway zone, they offer stopover locations for millions of migratory waterfowl to feed and nest in the spring and fall months. As previously mentioned, they're being depleted at an alarmingly high rate, and it's important for communities and recreation professionals to educate their user groups about the benefits wetlands provide and potential loss of recreational opportunities and flood protection they offer.

*Interpretive area at Whitehead Saline Wetlands. (Lancaster County)*

*Outdoor classroom at Fontenelle Forest. (Sarpy County)*

**What's in it for me?**

The role wetlands play in recreation is vast. They provide opportunities to hunt, trap, hike, view or photograph wildlife, or just enjoy the serene experience created by the flora and fauna. Anglers also benefit from wetlands because many species of fish use these areas for spawning or hiding, or because food produced by the wetlands are available for different fish species. Wetlands provide an excellent setting for environmental education because of the unusual life forms present and the unique features of the landscape in which they are located. Wetlands also serve a heritage function, because they represent a landscape as it once appeared in the past. Interpretive signage can help visitors understand the historical significance of these unique properties.

*Did you know that wetlands can be considered a suitable replacement of recreation in LWCF conversion projects to replace a loss of recreation in an area since they offer opportunities for wildlife watching, hunting, hiking, and much more?*

Any wetland has the potential to provide for recreation, either through direct use or because of the fish and wildlife that they support. Many organizations and agencies have put resources into conserving and managing some outstanding examples of Nebraska's wetland resources. These entities have acquired or in other ways protected approximately 50,000 acres of wetlands in Nebraska, and most of these are open to public use. However, privately-owned wetlands also provide tremendous recreation opportunities, but landowner permission is needed to access private property.


*Interpretive sign at Lake Seldom near Holdrege. (Phelps County)*

## SUCCESS STORY

### Lake Seldom Wetland Restoration Project

The City of Holdrege, in Phelps County, provides a great success story where a wetland restoration project in the Rainwater Basin improved quality of life for residents and the wildlife that use the wetland area as a place to rest and feed. Approximately 325 acres of greenspace were added to the city through this wetland and grassland project. This restoration provides recreation and education options and also many ecosystem services such as groundwater recharge, flood control, filtering of agricultural chemicals and sediment runoff, and wildlife habitat.

The restoration involved filling the large concentration pits, removing dikes and fill material that had been placed in the wetland, and re-establishing an upland buffer around the wetland. In addition to the wetland restoration, public use infrastructure was developed, including a parking lot, hiking trail that used funding from the Recreational Trails Program, and informational kiosk to serve as self-guided education and interpretation about the wetland area, and informational signage.

The project is unique because of the eventual ownership of the wetland by a non-wildlife entity, the City of Holdrege; and the combination of programs funding the restoration. The community got involved with the project because they saw the value in providing environmental, educational, recreational, and aesthetic values to the community. This is one way communities can capitalize on wetland areas to address the need for a balance between open space to recreate and the wetland's function as a spring migration habitat area.

**Partners in this effort** – Nebraska Game and Parks Commission, Tri-Basin Natural Resource District, Rainwater Basin Joint Venture, Ducks Unlimited, Partners for Fish and Wildlife, Nebraska Environmental Trust, Natural Resource Conservation Service, U.S. Fish and Wildlife Service.

Communities should start by considering how wetlands could play a role in the outdoor recreation they offer. Identifying where wetlands are located in relation to the community and outdoor recreation resources is a good place to begin this process. Once the location of wetland sites are identified, determining if they are public or private property would be the next step.

If the wetland area is on public property, there may be additional opportunities to provide recreation to the citizens of a community. For example, evaluating a current trail system and outdoor recreation areas that could connect wetlands and the amenities they offer would be one way to ensure a community is using these valuable recreation resources and services. The site could include education and interpretation elements along the trail to help the public understand the importance of wetlands and the services they offer to the environment.

If the wetland is on private property, a community could reach out to the landowner to determine if hunting, angling, or wildlife viewing opportunities could be made available to the public. As mentioned previously, there are organizations that offer conservation opportunities for wetland sites, which makes it advantageous for landowners to adopt wetland areas on private property as conservation locations in exchange for a monetary benefit. The OFW program discussed earlier in this chapter is one way NGPC is offering opportunities to expand the recreational use of private properties for the public.

**How do we conserve wetlands?**

There are specific steps that can be taken to conserve wetlands. Statewide recommendations on how to do this are described below.

**Protection:** Since a vast majority of Nebraska's wetlands are privately owned, the conservation of these areas requires understanding and meeting the unique needs of landowners. A variety of tools are already available to allow this to happen, but new ones also need to be developed. There is a need to develop alternative ways to protect our remaining wetlands. These should include the use of easements to protect areas while allowing them to remain in private ownership, and seeking ways to help landowners generate income from their wetlands. Efforts to acquire important wetland areas also must continue.

**Restoration:** Simply protecting our remaining wetland areas will not adequately ensure the conservation of our wetlands and the functions they provide. This is especially true for some wetland complexes where more than 90% of the wetlands have been eliminated or severely degraded. Efforts to restore wetlands on public and private land must be increased.

**Management:** Given that wetlands are dynamic systems that historically were disturbed frequently, it may not be adequate to simply put a fence around a wetland and "walk away" from it. In the absence of natural processes and disturbances, wetlands need some management. Management might include water-level changes, tree removal, burning, prescribed grazing and haying, and sediment removal. There is a need to provide management assistance, especially to private landowners.

**Education:** The importance of educating your users about how wetlands can serve as a benefit to humans and wildlife is paramount. Keeping them informed of the ways you're incorporating wetlands into your recreational efforts is also important. Ways communities can do this are by having events like open houses of the wetland area, creating nature trails with interpretive signage that allows the users to learn about the wildlife habitats, flora, fauna, and historical significance of the wetland site, or having outdoor classrooms for different ages to learn about them.

**Figure 3.6: Wetland Conservation Methods**



*Wetland restoration project at Memphis Lake WMA. (Saunders County)*

Although the destruction of wetlands has been greatly reduced due to laws and conservation efforts, the remaining wetlands in Nebraska continue to face threats that must be addressed. The greatest threats include human-accelerated sedimentation into wetlands, alteration of streams and rivers, drainage and filling, lack of proper management, and invasive species. The conservation priority for wetlands varies by wetland complex, and for many of the specific complexes detailed conservation plans have been developed. The priorities include protection, restoration, management, and education needs.

**Figure 3.7: Wetland Economic Impact**

# $110 million

in grant funds, which pump money into local economies, have been awarded over the past 25 years to protect and restore wetlands.

The Nebraska Environmental Trust is crucial in providing the required non-federal match to these federal sources.

*Refer to Chapter 5 for other funding mechanisms for outdoor recreation projects.*

*Observation deck at Marsh Wren Saline Wetland, a wetland restoration project by the Lower Platte South Natural Resources District. (Lancaster County)*

# HOW-TO

## *Integrate Wetland Conservation in Your Recreation Plan*

*There are tremendous opportunities available for the conservation and outdoor recreation available with Nebraska's wetlands. In 2019, NGPC partnered with the University of Nebraska-Lincoln on a guidebook, "Integrating Wetland Conservation into Local Planning," which provides information for recreation managers and providers of outdoor recreation to consider when planning for integrating and conserving wetlands. The guidebook includes toolkits for wetland conservation planning that can help walk through the process of planning for conservation of these valuable natural resources. Find it online at Water.UNL.edu/Documents/Wetland-Planning-Guidebook-2020.pdf.*


*Boardwalk at Fontenelle Forest. (Sarpy County)*

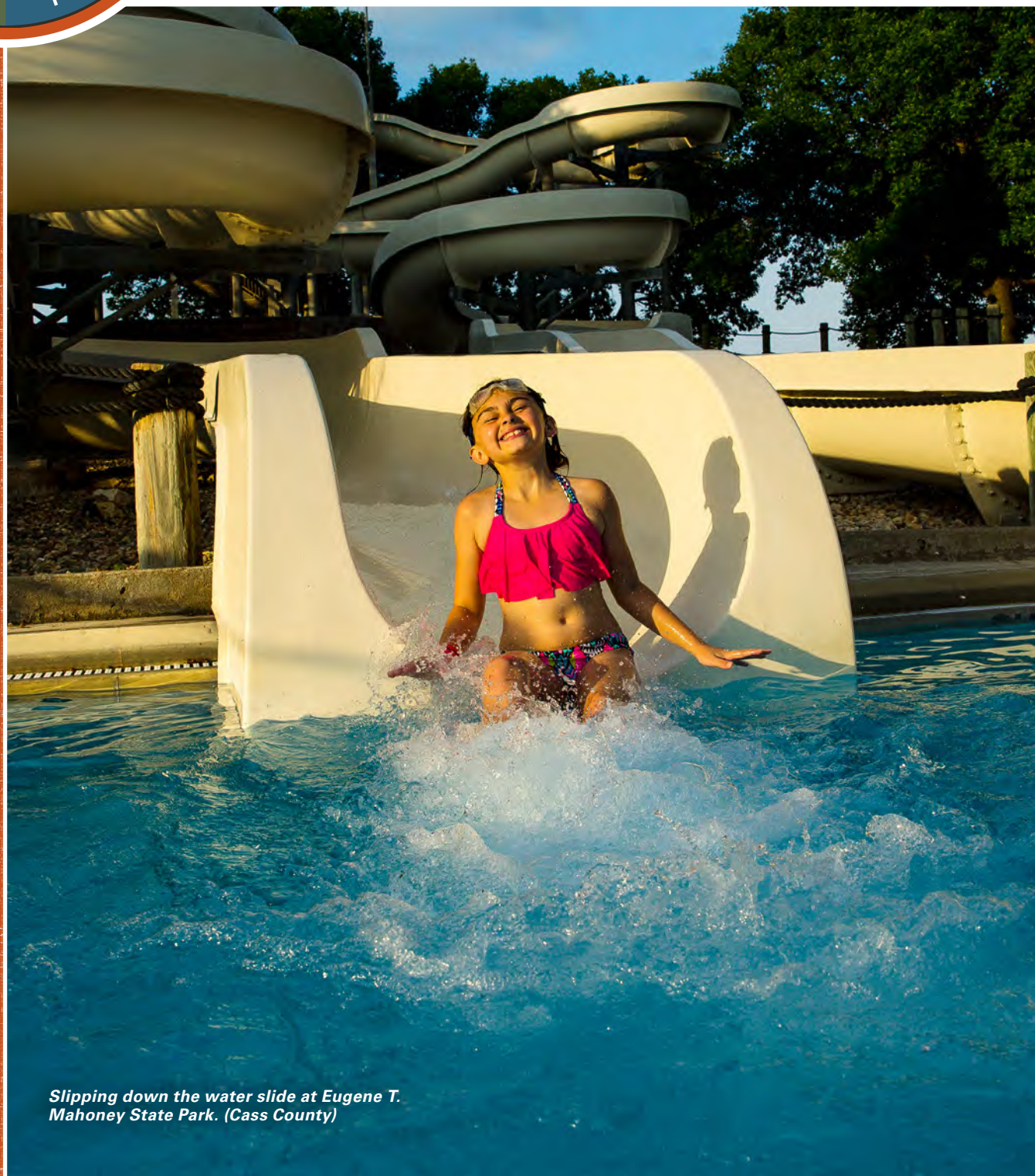
*For more information and planning resources on the wetlands of Nebraska, visit NebraskaWetlands.com.*

## Conclusion

This chapter showed the diversity of Nebraska's outdoor recreation resources and the providers that help manage and supply those recreational opportunities. Nebraska has a variety of options when it comes to outdoor recreation, and the providers help ensure a sufficient supply of those resources meet the needs of the users through public input when planning for outdoor recreation. The next chapter will discuss the demand for outdoor recreation in Nebraska and why it's vital for providers of recreation to meet the users' preferences.


CHAPTER 4

# Demand of Outdoor Recreation



*Slipping down the water slide at Eugene T. Mahoney State Park. (Cass County)*

## Introduction

This chapter provides insight regarding the demand for outdoor recreation amenities and activities by analyzing national, state, and local data; and the information gleaned through the public participation components administered by NGPC. These exercises help understand demand in each of the SCORP regions and guide communities in their recreation planning efforts.

### Public Participation

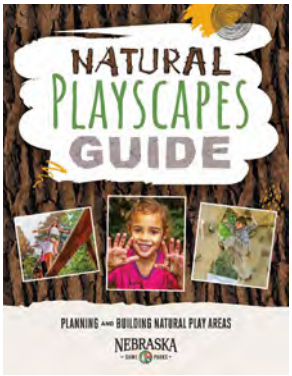
- A Generalized Outdoor Recreation Survey was conducted in 2018 to determine user experiences and preferences regarding public parks and recreational facilities within the State of Nebraska.
- An outdoor recreation survey was distributed electronically in 2019 to colleges and universities to understand their preferences.
- A community Outdoor Recreation Questionnaire was sent to every community in the state to inventory the amenities and services offered in their areas, and to understand the demand for supporting adventure recreation opportunities (e.g., climbing walls, zip-lining).
- A youth focused outdoor recreation survey was sent to fourth and fifth graders who participated in NGPC programming in 2019 to understand their outdoor recreation preferences.
- A youth art activity was created and conducted at urban schools in 2019 to understand the outdoor recreation amenities they use or would like to see added to parks.
- An advisory committee comprised of recreation professionals from Natural Resource Districts, Park and Recreation departments, internal staff from NGPC, and community members from urban and rural areas was created in 2019 to gather input about the action plan and how to connect the public with outdoor recreation.

## National Trends

When communities look to decide what they should add to the outdoor recreation they offer, they should consider what trends are occurring at the national level. According to the 2018 Outdoor Participation Report *(2018, The Outdoor Industry Foundation. Washington, DC.)*, 146 million Americans ages 6 and above, or 49% of the population, participated at least once in an outdoor activity in 2017. Similar to previous reports by the Outdoor Industry Foundation, running, jogging and trail running were the most popular activities among Americans, when measured by the number of participants and the number of total annual outings. Blacks and Hispanics went on the most average outings per participant. The report also illustrated 38% of adults introduced to the outdoors as children were more likely to participate in outdoor activities as adults than those who were not exposed as children. This shows the importance of introducing nature and outdoor activities to children.

HOW-TO

*Create a Natural Playscape*




*Children who frequent unstructured nature play are more likely to develop lifelong conservation values and behaviors. See the NGPC Natural Playscape Guide for more benefits of nature play and ideas on how to introduce children to nature. Learn more at OutdoorNebraska.gov/Playscapes.*

Below are the most popular activities by participation rate and favorite outdoor activity by frequency of participation for people ages 6 and above. Differences between the participation rate and frequency of participation among the top five activities is shown in the second and third activity. Other outdoor activities between participation rate and frequency remained similar, which indicates the continued level of interest in these activities from a national perspective.

***Participation rate:*** *The number of people actively involved in the outdoor recreation activity.*

### Most Popular Outdoor Activities by Participation Rate

1. **Running, Jogging, and Trail Running**
   19% of Americans / 55.9 million participants
2. **Freshwater, Saltwater and Fly Fishing**
   17% of Americans / 49.1 million participants
3. **Road Biking, Mountain Biking and BMX**
   16% of Americans / 47.5 million participants
4. **Hiking**
   15% of Americans / 44.9 million participants
5. **Car, Backyard, Backpacking and RV Camping**
   14% of Americans / 41.8 million participants

***Frequency of participation:*** *The rate at which people participated in the outdoor recreation activity by number of outings.*

### Favorite Outdoor Activities by Frequency of Participation

1. **Running, Jogging, and Trail Running**
   76 average outings per runner / 4.2 billion total outings
2. **Road Biking, Mountain Biking and BMX**
   48 average outings per cyclist / 2.3 billion total outings
3. **Freshwater, Saltwater and Fly Fishing**
   18 average outings per angler / 885.2 million total outings
4. **Hiking**
   14 average outings per hiker / 624.4 million total outings
5. **Car, Backyard, Backpacking and RV Camping**
   13 average outings per camper / 523.8 million total outings

*Fall camping at Eugene T. Mahoney State Park. (Cass County)*

The most popular activities listed above involve trails and amenities such as fishing and camping. The report shows hiking has gained more value from the American public as an outdoor recreation activity since 2013, as it was not listed in one of the top five activities. In 2017, it ranked fourth in both participation rate and frequency of participation. As participation in hiking increases, communities should consider the opportunities they have locally to provide this amenity, while also considering the other outdoor activities listed in the recreation their community can offer.

## Nebraska Trends

The Generalized Nebraska Survey mentioned previously yielded 1,502 responses from the seven SCORP Regions of Nebraska. The survey focused on the use of different types of recreational amenities and activities, limitations and expansion of certain amenities at parks, and demographic information. The results of this survey are displayed to the right and are used to illustrate the demand for outdoor recreation in Nebraska, establish the Action Plan for our state, and develop a list of priority projects for future Land and Water Conservation Fund (LWCF) appropriations.

In order to determine the level of demand Nebraskans have for recreation, it is necessary to evaluate the amenities used and how often people are participating in recreational activities. Ninety-two percent of respondents felt outdoor recreation was either very important or somewhat important to their quality of life, indicating outdoor recreation plays a critical role in the quality of life of Nebraskans. This inherently suggests the support for funding, maintaining, and expanding facilities within communities in recreation areas.

The data from the survey further illustrates how often people went outside to recreate in 2018. Over half of respondents, approximately 57%, are recreating about the same, which indicates a majority of people haven't changed their level of participation in recreation since the last SCORP survey. Whereas, 27% are recreating less, and approximately 16% are recreating more. Respondents recreating less could be influenced by the top five factors limiting households' participation in outdoor recreation, which is presented in Figure 4.3.

**Figure 4.1: How Important Nebraskans See Outdoor Recreation To Their Quality of Life**

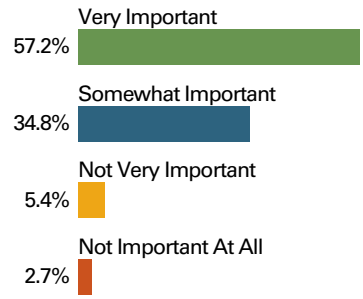



**Figure 4.2: Frequency of Recreation in 2018**

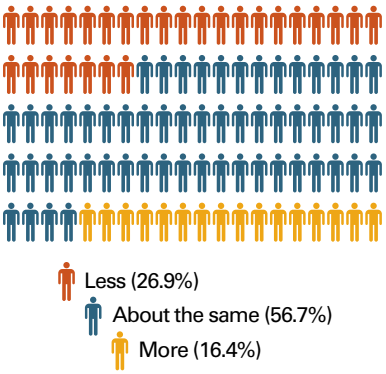



**Figure 4.3: Top 5 Factors That Limit Households' Participation in Outdoor Recreation**

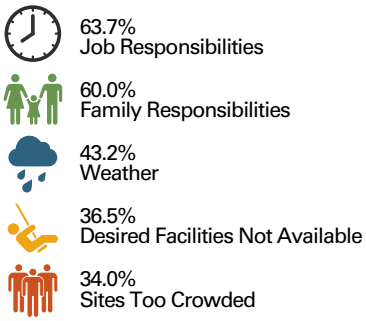
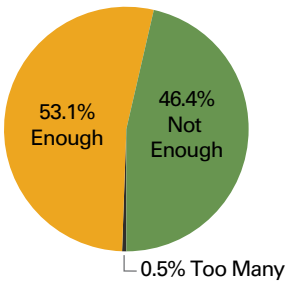



**Figure 4.4: Feeling About the Outdoor Recreational Activities Their Community Provides**




The first three factors limiting recreation include: job responsibilities, family responsibilities, and weather, which communities or recreation professionals cannot control. However, the last two factors, desired facilities not available and crowded sites, are items communities can focus on to increase participation in outdoor recreation. Other responses limiting participation also included: sites are too far away, lack of information about sites, and lack of recreational skills. COVID-19 has brought some opportunity in the recreation world as there has been an uptick in participation indicated by the increase in all NGPC permit sales due to a lack of competition for other activities that are safe. These limitations and opportunities associated with COVID-19 should be considered when communities are determining where to focus their efforts in improving their future outdoor recreation offerings.

Over half of respondents felt they had enough recreation activities in their community. This is slightly lower than in 2014, where 58% of respondents felt they had enough recreational activities. Communities should take this into consideration as a question they pose to their constituents to better understand opinions of the recreation resources currently offered.

*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*

**Table 4.1: Local Park and State Park Amenities Used in 2018, Statewide and by SCORP Region**

| Local Park Amenities Used in the Last 12 Months | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Statewide** | **Region 1** | **Region 2** | **Region 3** | **Region 4** | **Region 5** | **Region 6** | **Region 7** |
| 63.6% Picnic Areas | 73.5% Hiking/Biking Trails | 67.7% Picnic Areas | 59.4% Playgrounds | 66.2% Playgrounds | 67.2% Picnic Areas | 54.6% Museum/Visitor Centers | 60.7% Picnic Areas |
| 62.1% Hiking/Biking Trails | 64.5% Picnic Areas | 64.0% Playgrounds | 59.3% Picnic Areas | 61.0% Picnic Areas | 55.9% Playgrounds | 54.4% Picnic Areas | 45.2% Playgrounds |
| 60.8% Playgrounds | 61.6% Playgrounds | 51.3% Museum/Visitor Centers | 41.5% Museum/Visitor Centers | 57.8% Hiking/Biking Trails | 52.1% Swimming Facilities | 50.4% Playgrounds | 39.1% Fishing Docks |
| 54.4% Museum/Visitor Centers | 57.9% Museum/Visitor Centers | 44.0% Swimming Facilities | 41.4% Swimming Facilities | 56.1% Museum/Visitor Centers | 46.8% Museum/Visitor Centers | 48.0% Hiking/Biking Trails | 35.1% Swimming Facilities |
| 43.0% Swimming Facilities | 40.6% Swimming Facilities | 43.1% Hiking/Biking Trails | 38.9% Hiking/Biking Trails | 54.5% Swimming Facilities | 46.7% Fishing Docks | 36.5% Fishing Docks | 33.3% Museum/Visitor Centers |
| **State Park Amenities Used in the Last 12 Months** | | | | | | | |
| 50.5% Picnic Areas | 50.7% Picnic Areas | 54.9% Picnic Areas | 44.0% Museum/Visitor Centers | 48.2% Picnic Areas | 59.6% Picnic Areas | 46.2% Picnic Areas | 45.8% Picnic Areas |
| 43.4% Hiking Trails | 49.1% Hiking Trails | 48.5% Museum/Visitor Centers | 42.5% Picnic Areas | 42.7% Playgrounds | 51.2% Fishing Docks | 45.7% Museum/Visitor Centers | 36.8% Fishing Docks |
| 42.3% Museum/Visitor Centers | 44.0% Museum/Visitor Centers | 47.6% Playgrounds | 35.5% Playgrounds | 35.5% Museum/Visitor Centers | 47.7% Campsites | 42.8% Hiking Trails | 36.4% Campsites |
| 39.7% Playgrounds | 40.1% Playgrounds | 37.0% Campsites | 34.5% Campsites | 34.8% Campsites | 43.4% Marina/Boat Launches | 36.7% Campsites | 28.8% Marina/Boat Launches |
| 35.8% Campsites | 34.4% Campsites | 36.6% Hiking Trails | 33.9% Hiking Trails | 33.1% Hiking Trails | 39.8% Playgrounds | 34.6% Fishing Docks | 26.8% Museum/Visitor Centers |

*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*
*[1] These percentages will add up to more than 100% because respondents were able to select more than one service or amenity.*

Respondents were asked to choose the amenities they have used at local or state parks in 2018. The top five of the 15 amenities listed in the survey are in Table 4.1.

Table 4.1 shows participants use similar local and state park amenities, with the exception of swimming facilities at local parks and campsites at state parks. These top amenities are similar to the results in the 2009 and 2014 Generalized Nebraska Outdoor Recreation surveys, illustrating that these amenities continue to be valuable to Nebraskans.

*Having a picnic at Medicine Creek State Recreation Area. (Frontier County)*

*Hiking and biking trails are a top amenity. Don't forget to provide wayfinding signage for your guests to more easily navigate the trails you offer.*

When the top five amenities are broken down by region, most of the regions use the same amenities at the local and statewide level, with Regions 5, 6, and 7 using fishing docks as one of the top 5 amenities in their area, and were generally used more often in state parks. The other top amenities used by respondents were similar to those listed on a statewide basis. This information can be used to guide local communities and state park professionals when making decisions about the type of infrastructure in which to invest that will be suitable for the amenities the public demands. Taking into consideration the demographics of the region referenced in Chapter 2 of SCORP also will aid in making decisions on which recreation amenities to offer.

*Hiking and biking trails remain a top amenity for Nebraskans over the last three SCORPs and contribute to a better quality of life.*

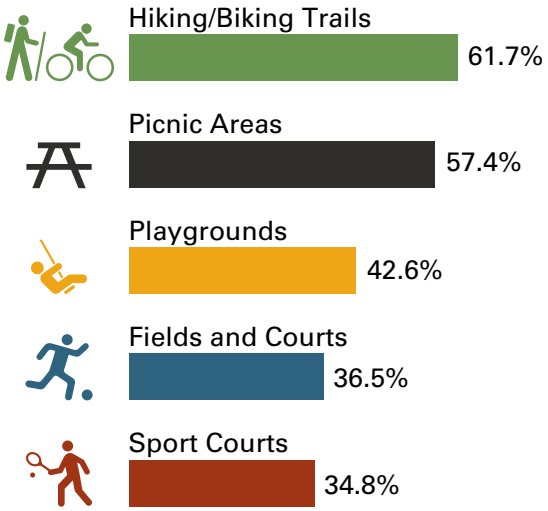
The same question was asked to college students about their use of the 15 amenities at local vs. state parks in the last 12 months. The survey was a pilot study sent electronically through university and college listservs to gain an unbiased representation of student outdoor recreation preferences among the different majors at the college. Six colleges in both urban and rural areas of the state participated in the survey, yielding 115 responses.

Similar to the amenities general Nebraskans prefer at local parks, college students indicated they have used hiking/biking trails, picnic areas, and playground facilities in the last 12 months. Alternatively, college students use sport courts and fields (e.g., soccer, football) more often than the respondents in the General Nebraska Survey. One reason could be because 42% of respondents in the General Nebraska survey were 65 years of age and older, and around 84% of respondents of the college-age survey were between 19 and 24. The college survey helps show the differences in outdoor recreation preferences among a specific age group that wasn't heavily represented in the general survey.

Looking at the same question for state parks, hiking/biking trails, picnic areas, and campsites were among the top five amenities preferred by respondents of both the General Nebraska Survey and college students. Swimming facilities were also listed in the top five preferred amenities in state parks, but not local parks. This could be because state parks provide a different type of swimming experience for visitors.

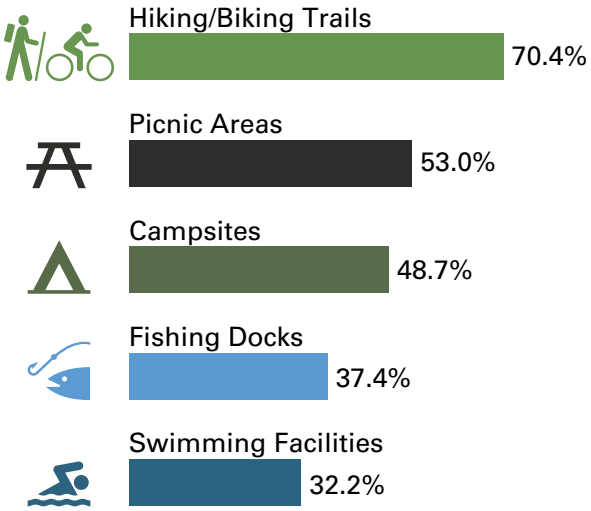
Keeping in mind the difference in the survey sample size and age demographics between the General Nebraska and college-aged outdoor recreation surveys, communities should ask themselves if college age residents are coming back into communities when they aren't in school and if preferences are being met within the community. Ultimately, all providers of recreation could use this data to ensure recreation offerings are in line with the preferences of their college age residents.

**Figure 4.5: College Student Preferences at Local Parks**




*Source: "College Outdoor Recreation Survey." Conducted by NGPC. (2019). Lincoln, NE.*

**Figure 4.6: College Student Preferences at State Parks**




*Source: "College Outdoor Recreation Survey." Conducted by NGPC. (2019). Lincoln, NE.*

*College students enjoy a bonfire on a sandbar near the Platte River. (Sarpy County)*

Participants were also asked to select the factors that limit their participation in outdoor recreation. School workload was the number one reason, accounting for 72%, followed by job responsibilities (50%), lack of information about sites (31%), friends did not participate (30.4%), and desired facilities are not available in their area (29%). Referencing the limitations for participants of the General Nebraska Survey mentioned previously, three of the limitations selected in the college survey are out of the control of the providers who offer the recreation amenities. However, efforts could be made to improve marketing of outdoor recreational opportunity information by using channels college students prefer and providing desirable facilities near their customers. Perhaps determining what those desired facilities are and why friends aren't participating could also be a step toward addressing the factors that limit this demographic from participating in outdoor recreational activities.

This section showed the similarities and differences in the preferences among participants in the General Nebraska Survey and those who took part in the college demographic survey. The demand for outdoor recreation is different among specific demographics, and understanding the preferences of target user groups is an important piece recreation professionals should consider in the recreation offered.

*Playing baseball at Tranquility Park in Omaha. (Douglas County)*

## Rates of Nebraska Recreation by Activity

The activities in which people participate are critical to understanding demand, along with how often people are participating in recreation activities. Therefore, within the general Nebraska Survey, NGPC partitioned the types of activities people used at a local or state park in 2018 into four categories: water-based, land-based, snow-based, and recreational sports.

The rates of different types of recreation activities are highlighted in Tables 4.2 and 4.3 throughout the state. Communities should consider evaluating their current recreation offerings and determine if the activities in these tables are something that would benefit their constituents.

**Table 4.2: Rates of Nebraska Water-Based and Land-Based Recreation Activities**

| Water-Based Activities | | | Land-Based Activities | | |
|---|---|---|---|---|---|
| **6+ Times** | **1-5 Times** | **Never** | **6+ Times** | **1-5 Times** | **Never** |
| 15.2% Swimming at a Pool | 30.0% Swimming at a Pool | 98.8% Kiteboarding | 40.0% Walking | 46.3% Visiting a Historical Site | 94.2% Equestrian Activities |
| 13.9% Fishing from Bank/Dock/Jetty | 28.1% Fishing from Bank/Dock/Jetty | 97.7% Sail Boating | 25.9% Going to a Playground | 39.2% Walking | 93.1% Skateboarding |
| 12.5% Swimming/Wading at a Beach | 26.8% Swimming/Wading at a Beach | 91.3% Kayaking | 17.2% Running/Jogging | 38.6% Hiking | 89.4% Riding an ATV |
| 10.6% Motor Boating | 26.7% Spray Park | 87.6% Water Skiing | 16.8% Biking | 35.6% Going to a Playground | 86.2% Archery |
| 10.2% Fishing from a Boat | 18.7% Motor Boating | 87.4% Canoeing | 15.5% Hiking | 34.0% Visiting a Nature Center | 85.4% Gardening |

*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*
*[1] These percentages will add up to more than 100% because respondents were able to select more than one service or amenity.*

**Table 4.3: Rates of Nebraska Snow-Based and Sports Recreation Activities**

| Snow-Based Activities | | | Recreational Sports | | |
|---|---|---|---|---|---|
| **6+ Times** | **1-5 Times** | **Never** | **6+ Times** | **1-5 Times** | **Never** |
| 10.9% Playing in the Snow | 25.1% Playing in the Snow | 96.4% Snowmobiling | 8.6% Baseball | 18.0% Golf | 99.6% Lacrosse |
| 6.8% Sledding | 23.8% Sledding | 96.3% Snow Skiing | 6.1% Softball | 11.3% Basketball | 99.0% Rugby |
| 2.4% Ice Skating | 9.3% Ice Fishing | 91.0% Ice Skating | 6.0% Basketball & Golf | 10.5% Soccer | 90.7% Tennis |
| 1.8% Ice Fishing | 6.6% Ice Skating | 88.9% Ice Fishing | 5.0% Volleyball | 10.0% Football | 87.5% Softball |
| 1.2% Snowmobiling | 3.6% Snow Skiing | 69.4% Sledding | 4.8% Soccer | 9.4% Volleyball | 85.6% Volleyball |

*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*
*[1] These percentages will add up to more than 100% because respondents were able to select more than one service or amenity.*

*Don't forget to ensure the amenities you offer take into account disabled populations and how to accommodate those needs with accessible options.*

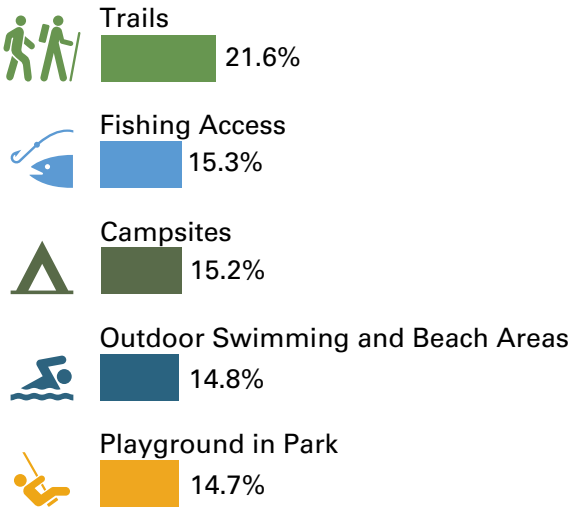
*Ice fishing at Lake Wanahoo. (Saunders County)*

## Importance of Outdoor Recreation and Additional Recreation Opportunities

Figures 4.7 and 4.8 show the outdoor recreational facilities important to Nebraskans. Aside from trails, the level of importance of top amenities has changed since 2014. For example, picnic areas are an amenity that's of higher importance to general Nebraskans that participated in the 2018 survey. It's important for communities to be aware of this and evaluate opportunities that are valued by respondents.

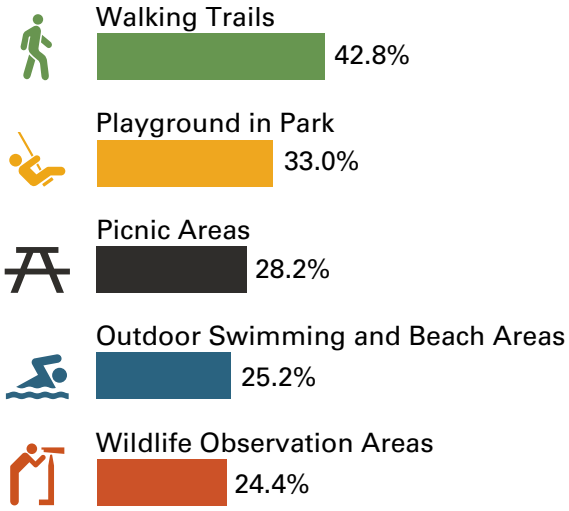
Expanding more picnic facilities could be a way to meet the demand of specific demographics within the state. Offering picnic facilities in park areas where large gatherings take place could provide more opportunities for families to have social gatherings. For example, Hispanic populations are a demographic that continues to increase in many SCORP regions, and offering additional picnic facilities for their extended-family gatherings would be one way to meet the needs of this user group.

**Figure 4.7: Statewide Important to Have in 2014**




*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*

**Figure 4.8: Statewide Important to Have in 2018**

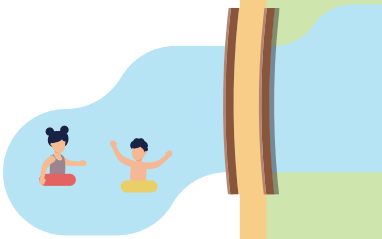



*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*

*Hiking trails and recreational infrastructure continue to be the top two amenities Nebraskans would like to see more of on the landscape.*

The results from 2014 to 2018 amenities the public would like to see added or expanded are illustrated in Table 4.4. Even with the state's extensive network of trails, hiking trails along with recreational infrastructure continue to be the top two amenities Nebraskans would like to see expanded. These data characterize the need for time and resources in developing additional trails and infrastructure (e.g., roads, signs, restrooms, showers, etc.). Adventure activities such as zip-lining and rock climbing were an amenity the public would like to see added to outdoor recreation areas. Local providers indicated on the Community Outdoor Recreation Questionnaire that they would support allocating resources to adventure activities, which further supports the notion that this would be a good investment for communities and recreation professionals to make.

# SUCCESS STORY



*Floating playground at Louisville State Recreation Area. (Cass County)*

**NGPC Venture Parks**

NGPC has started implementing more adventure activities in our state park system through the Venture Parks program.

The NGPC's Venture Park Project is a notable success story. This project resides in the eastern portion of the state at four different park locations. It all began with an overwhelming demand for unique experiences within Nebraska's state park system. The Venture Park Project is an innovative public-private partnership that encourages families to get outdoors, welcoming a new generation of park visitors and developing markets for new user groups. It helps inspire guests to adventure into recreational opportunities NGPC has never offered, like the Go Ape ropes course, climbing wall, floating playground, Crawdad Creek and glamping cabins.

*Indoor rock climbing wall at Eugene T. Mahoney State Park. (Cass County)*

The public-private partnership created in this endeavor has been a success story in and of itself. However, the doors that have opened for existing and potential guests have just begun! This project has many layers and continues to prove challenging and rewarding elements for the NGPC team and its partners throughout the planning process. This project is a great example of the importance in building partnerships and how surveying efforts have led to NGPC focusing on how to offer new amenities that appeal to a broader audience.

*Walking and fishing at Lake Wanahoo NRD Recreation Area. (Saunders County)*

As with the amenities discussed previously in the "What Nebraskans do in Local vs. State Parks" table, amenities were broken out by region to analyze the differences among the top five amenities people found important to have and want to see added within each region.

Of the 18 activities respondents had to choose from to indicate how important particular outdoor recreation amenities were to them, walking trails, picnic areas, and playgrounds were among the top five in every region. However, Region 1 valued wildlife viewing areas as important to have, along with "other" amenities, which included a lumped array of outdoor recreation facilities. This could be a result of limited green space in Region 1, subsequently increasing the presence of urban sprawl and less wildlife habitat. When considering the level of value placed on wildlife habitat as an amenity offered in this region, it's important to examine the potential demographic, societal and cultural differences in perspectives of those located in the region, which may influence their desire or need for amenities such as wildlife habitat and viewing opportunities.

Regions 2 and 3 were the only regions that valued outdoor swimming and beach access as one of their top five amenities, which are also part of the top five amenities in the state as a whole. Campsites were found to be among the top five amenities in Regions 2, 3, 4, 5, and 6. Although not listed in Table 4.4, campsites were the sixth statewide amenity of importance. Fishing access was considered important in Regions 4, 6 and 7. Respondents in Region 7 considered hunting access as one of their top five amenities, which suggests the providers in this area should focus on offering this recreation opportunity.

This information can be incredibly useful for local providers of outdoor recreation. If camping and access to waterbodies is available in an area, providing access to fishing and swimming opportunities should be a priority. Similarly, picnicking facilities, which were also a top amenity in many regions, are an inexpensive amenity that providers should consider to enhance recreation offerings.

The survey offered 28 options of facilities and services to add or expand. The top five in each region are illustrated in Table 4.4. Every region has infrastructure as one of the outdoor recreation amenities they would like to see added. This could mean that respondents see a need for additional facilities or that perhaps the current facilities aren't in the right place and need to be relocated or revamped.

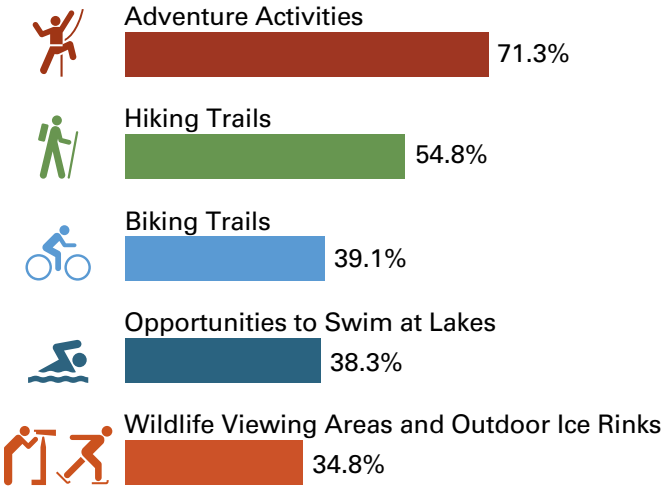
Every region except Regions 5 and 7 would like to see additional hiking trails. This indicates there is a need for additional hiking trails to meet the needs of Nebraskans. Regions 1, 3 and 4 would like to see more adventure activities. Regions 5, 6 and 7 believe a variety of fishing opportunities should be added, including lake fishing, bank fishing, and river/stream fishing. Local providers should consider expanding these opportunities to meet the needs of the users in these regions. Playgrounds and picnic shelters are still considered an important amenity in many of the regions, which indicates the high importance placed on them.

**Table 4.4: Outdoor Recreational Facilities Nebraskans Think Are Important to Have and Would Like To Have Added**

| Outdoor Recreational Facilities Nebraskans Think Are Important to Have | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Statewide** | **Region 1** | **Region 2** | **Region 3** | **Region 4** | **Region 5** | **Region 6** | **Region 7** |
| 42.8% Walking Trails | 78.3% Walking Trails | 58.9% Playgrounds | 57.2% Playgrounds | 65.6% Walking Trails | 64.4% Fishing Access | 62.8% Walking Trails | 53.8% Picnic Areas |
| 33.0% Playgrounds in Parks | 63.8% Picnic Areas | 54.8% Walking Trails | 54.9% Picnic Areas | 64.3% Playgrounds | 58.0% Playgrounds | 58.5% Picnic Areas | 53.2% Playgrounds |
| 28.2% Picnic Areas | 59.7% Playgrounds | 54.0% Picnic Areas | 54.3% Walking Trails | 57.4% Picnic Areas | 56.3% Picnic Areas | 55.3% Playgrounds | 52.2% Fishing Access |
| 25.2% Outdoor Swimming/Beach | 51.4% Wildlife Viewing Areas | 41.2% Outdoor Swimming/Beach | 48.7% Campsites | 46.2% Campsites | 55.6% Walking Trails | 51.5% Fishing Access | 51.7% Hunting Areas |
| 24.4% Wildlife Viewing Areas | 46.6% Other | 38.9% Campsites | 46.2% Outdoor Swimming/Beach | 45.8% Fishing Access | 53.7% Campsites | 48.2% Campsites | 48.3% Walking Trails |
| **Outdoor Recreational Facilities Nebraskans Would Like To Have Added** | | | | | | | |
| 76.3% Hiking Trails | 83.1% Hiking Trails | 69.5% Infrastructure | 67.8% Hiking Trails | 71.5% Infrastructure | 70.5% Picnic Areas | 69.4% Picnic Areas | 68.7% Bank Fishing |
| 70.9% Infrastructure | 75.2% Picnic Shelters/ Tables | 64.9% Hiking Trails | 67.4% Infrastructure/ Picnic Shelters/ Tables | 70.9% Hiking Trails | 70.1% Lake Fishing | 67.5% Infrastructure | 65.6% Infrastructure |
| 68.0% Adventure Activities | 73.1% Adventure Activities | 64.4% Picnic Shelters/ Tables | 65.9% Playgrounds | 68.0% Wildlife Viewing Areas | 67.7% Bank Fishing | 65.5% Hiking Trails | 65.4% Picnic Areas |
| 63.7% Biking Trails | 72.3% Infrastructure | 61.2% Playgrounds | 63.0% Bank Fishing | 67.4% Adventure Activities | 67.3% Infrastructure | 63.9% Bank Fishing | 59.1% Lake Fishing |
| 59.5% Cabins | 70.0% Biking Trails | 59.6% Wildlife Viewing Areas | 61.5% Adventure Activities | 65.3% Playgrounds | 65.8% Playgrounds | 62.4% Lake Fishing | 57.3% River/Stream Fishing |

*Source: "Nebraska Outdoor Recreation Survey." Conducted by UNL-BOSR. (2018). Lincoln, NE.*

**Figure 4.9: Amenities to Add Based on College Survey**




*Source:"College Outdoor Recreation Survey." Conducted by NGPC. (2019). Lincoln, NE.*

Referencing the college-age survey discussed previously, students were asked to indicate the services or amenities they would like to have added or expanded to Nebraska's outdoor recreation. The top amenities are listed in Figure 4.9.

Similar to respondents of the General Nebraska Survey, it appears college students are also interested in seeing additional adventure activities and hiking and biking trails offered. However, they differ from the general public survey on the remainder of amenities listed in Figure 4.9. Again, this supports the notion that this demographic has different preferences for outdoor recreation compared to the general public. One item respondents of the General Nebraska Survey noted was the need for additional infrastructure. This wasn't considered in the top amenities to add. Perhaps this could be correlated with age, because with age, condition or availability of infrastructure, such as shower houses, roads, or picnic shelters, could become more important.

*Go Ape Treetop Adventure at Eugene T. Mahoney State Park. (Cass County)*

It is evident in these surveys that demand can vary by demographic and within different regions of Nebraska. It's very important for communities to identify the needs of their constituents because not every community has the same wants and desires. The types of amenities and services offered in an area should be in line with what the people demand. Frequent surveying of a community's wants and desires is also important, and should occur at a minimum of every five years to ensure demand is being met, and that you're aware of any changes that might be needed.

## Youth Pilot Study 1: Art Activity

Two pilot studies were conducted in 2019 to get a better idea of outdoor recreation preferences among youth. The first study was for students K-5 to participate in an art activity that involved drawing their perfect park. The objective was to take the students through an exercise requiring them to think about what they currently like to do at parks and what they would like to see added in the future. A total of 84 students participated. A few examples of artwork are illustrated here. The children were creative in this pilot study, as their examples show treehouses, zip lines, and even areas for wildlife and ecology within their drawings.

The top amenities the children indicated interest in are illustrated in Figure 4.10. Even though the sample size was small in this pilot study, the top amenities are similar with those indicated at regional levels in the other surveys conducted in SCORP. For example, zip lines, which are considered an adventure activity, were among the top 5 amenities in each of the surveys that people would like to see in parks.

It was evident through Figure 4.10 that youth valued playgrounds and the amenities within them. This pilot study was urban-centric as it involved elementary students in Lincoln, Nebraska. However, it does give a depiction of the types of amenities and features children would like to continue to see in parks. Communities should take this into consideration when planning outdoor recreation amenities for this demographic.

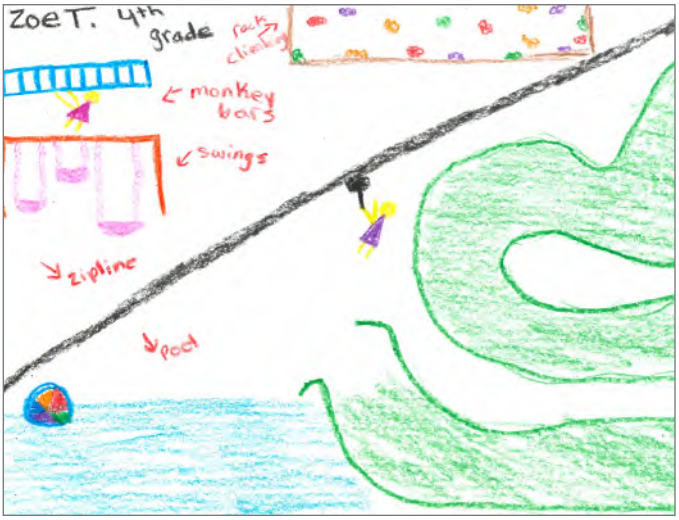
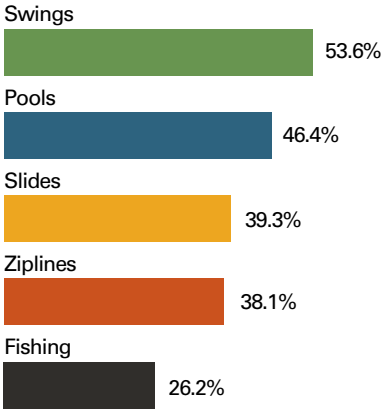
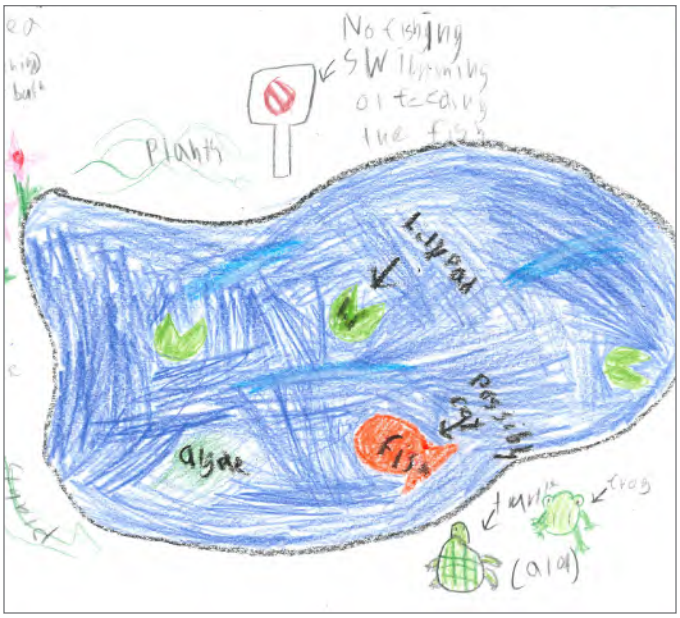
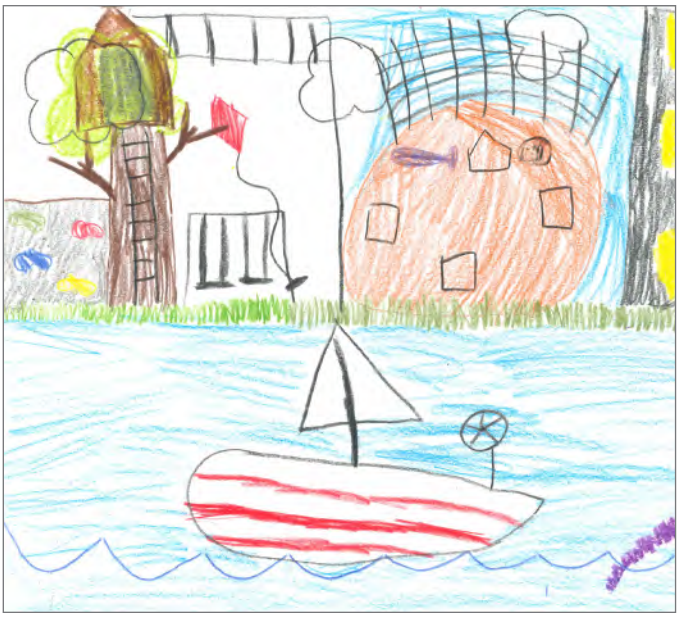



**Figure 4.10: Top 5 Outdoor Recreation Amenities Among Perfect Park Art**



*Source:"Youth Outdoor Recreation Survey." Conducted by NGPC. (2019). Lincoln, NE.*

## Youth Pilot Study 2: Outdoor Recreation Survey

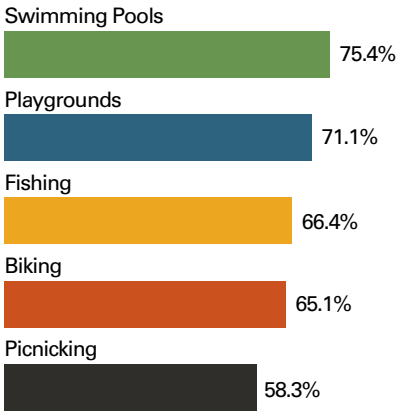
The Outdoor Recreation Survey was the other pilot study completed by 726 students to understand youth outdoor recreation preferences. This study targeted fourth and fifth grade students that attended the NGPC sponsored Fort Kearny and Ponca State Park Outdoor Discovery Programs in 2019.

Students were asked where they play once they get home from school. Seventy-three percent indicated they play at their house and 36% at a neighborhood park.[1] This shows many of the respondents find outdoor entertainment near their homes, but over a third use their neighborhood park as an area to recreate.

Since proximity of a nearby park can influence visitation, it was asked if there was a neighborhood park near where the respondents live. Over two-thirds indicated yes. Frequency in which respondents use the nearby park also was asked. Over half indicated they use the park only on weekends or once a week. This isn't particularly surprising given the school and home schedules of youths, but should be taken into consideration when planning programs and events at parks.

Students were asked if they go to state park or recreation areas outside their hometown. Sixty percent of participants indicated yes. Participants were then asked which activities they participate in at parks (Figure 4.11).

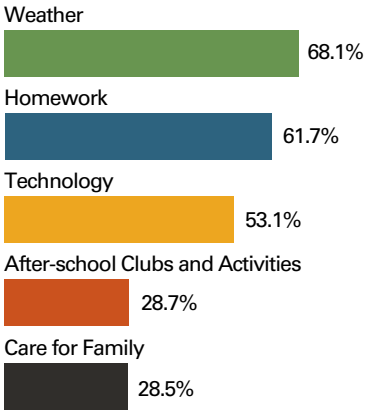
**Figure 4.11: Top 5 Outdoor Recreation Amenities Used By Youth**




[1]*Percentages in this study may add up to more than 100% because participants could select more than one answer.*

*Source: "Youth Outdoor Recreation Survey." Conducted by NGPC. (2019). Lincoln, NE.*

**Figure 4.12: Top 5 Limitations that Prevent Youth from Recreating**




What limits youth from going outdoors also was asked (Figure 4.12). A majority of these reasons cannot easily be influenced by providers of outdoor recreation. However, it does help understand which areas to focus on when trying to get youth outdoors. For example, technology could be used as a catalyst to get youth outdoors. Once there, outdoor skills-based or self-guided learning can take place.

Youth also were asked to indicate if an adult had ever taken them fishing or hunting, and if it was within the past year. Fifty-seven percent had gone fishing and 43% had gone hunting with an adult in the last year. Keep in mind, there could be a correlation with more youth participating in these activities due to the location and availability of opportunities compared to other regions, such as the Metro region. Additional survey data in the metro region is needed to truly reflect the percentage of youth participating in these activities. Nonetheless, it's still interesting to see participation of these recreation activities because it gives providers a sense of the level of interest in these activities.

*Be mindful of demographics and demand outlined in your specific region when determining recreation amenities to offer.*

This study was a great way to understand the different desires and limitations of going outdoors for youth. Providers of recreation should consider this when trying to determine if the needs of youth have been met in the outdoor recreation they offer.

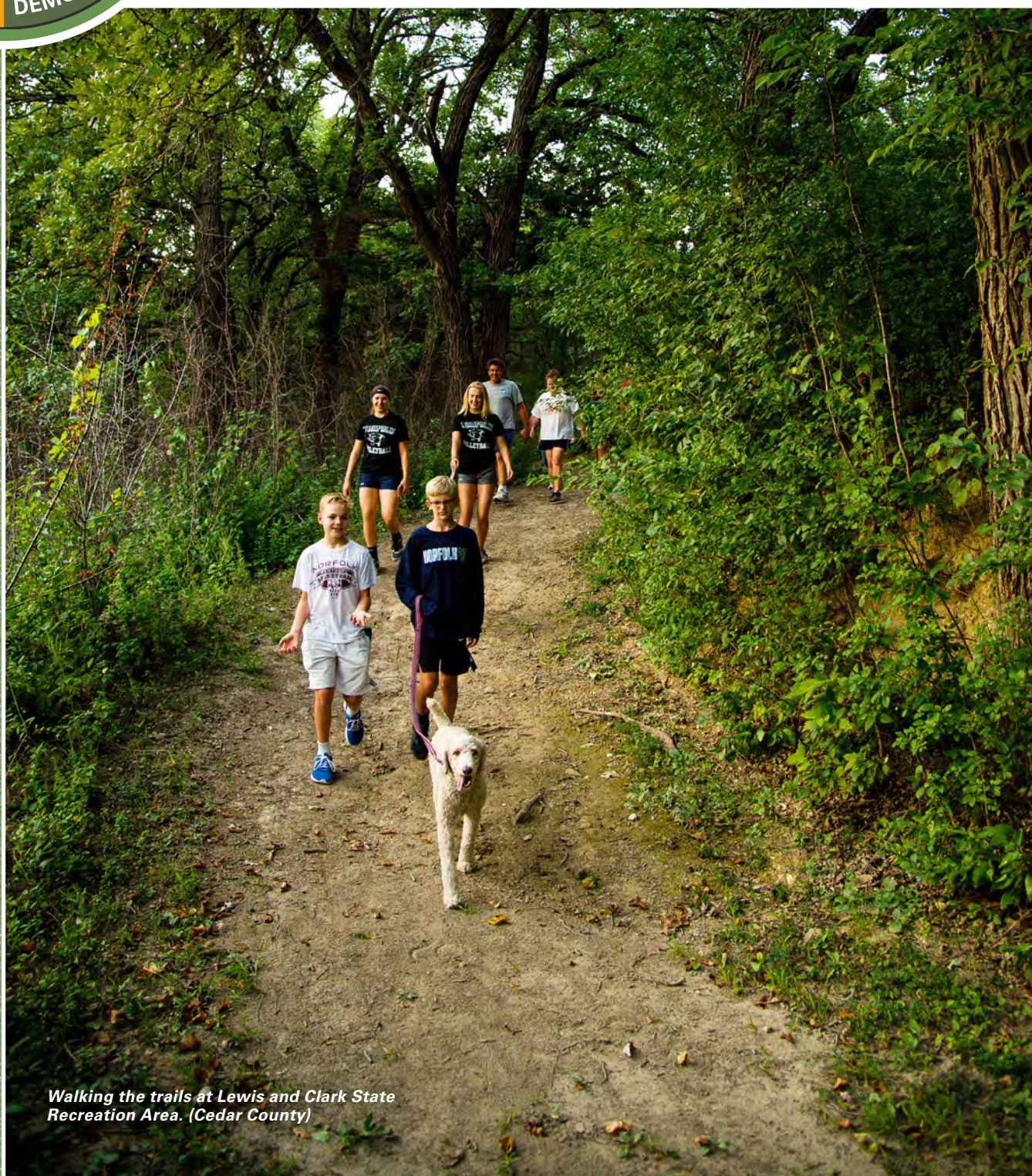
*Fishing is one of many attractions at Barnett Park in McCook. (Red Willow County)*

## Conclusion

This chapter characterized the demand for outdoor recreation in Nebraska based on the surveys and public outreach components conducted during the SCORP planning period. Through analysis of national, state, local, and specific user-group preferences presented in this chapter, communities and providers of recreation have a resource to help them plan outdoor recreation efforts that meet the needs of their constituents. The next chapter will discuss the action plan for Nebraska based on the supply and demand for outdoor recreation. The last chapter of SCORP also will focus on ways to help your community achieve your outdoor recreation success story, regardless of where you are within the planning process.


CHAPTER 5

# Guiding Success



*Walking the trails at Lewis and Clark State Recreation Area. (Cedar County)*

## Introduction

For many members of the public, interest in Nebraska outdoor recreation starts with playing in the backyard or playground, picking up a fishing pole for the first time, trying a kayak at a special event, or lacing up a new pair of running shoes for a journey through a natural trail winding through beautiful trees and meadows. These simple acts of recreating can be gateways that encourage people to expand their horizons to other forms of outdoor recreation. Providing opportunities for Nebraskans to participate in gateway activities close to home, at state or local parks, or in remote locations is a great way for the public to connect to the great outdoors.

This chapter will discuss the action plan for Nebraska based on the supply and demand for outdoor recreation. How to start making outdoor recreation plans within your community a reality also will be highlighted, with specific examples of recreation success stories throughout the state. Whether it's how to gain input from your constituents or how to build partnerships, this chapter gives you a starting place to move forward with your outdoor recreation success stories.

*Fall hiking at Indian Cave State Park. (Richardson County)*

## Why an Action Plan?

In order to guide Nebraska outdoor recreation over the next five years, an action plan that outlines strategic initiatives reflective of Nebraskans' demand is necessary. The goals and Land and Water Conservation Fund (LWCF) priorities in this chapter provide a path for Nebraska to follow. LWCF requires outdoor recreation priority areas be identified in SCORP to assist in funding allocation.

The action plan for Nebraska was developed through public participation among Nebraskans outlined in previous chapters of SCORP, the advisory committee, and public comment period. Recommendations and helpful tips outlined in this chapter are intended to help guide providers of recreation over the next five years, while taking into consideration the opportunities available for funding through programs to enhance outdoor recreation within Nebraska. Success stories within each goal show the variety of outdoor recreation projects happening around our great state.

*Youth Mentor Ponca Bluffs Jake Turkey Hunt at Ponca State Park. (Dixon County)*

**Every community has an outdoor recreation success story.** It doesn't matter how big or small it is, it's a matter of setting the process up for achievement. Figure 5.1 presents a path to use as a model in outdoor recreation planning efforts as you work toward your success stories. Communities should consider this information as they work toward achieving their project, thus creating their own success story.

**Figure 5.1: Outdoor Recreation Planning Path To Success**


*Ice fishing at Ponca State Park. (Dixon County)*

## Goals and Recommendations

To paint a picture of where outdoor recreation in Nebraska is headed over the next five years, goals have been outlined. Goals are defined as broad statements detailing what the State of Nebraska wants to accomplish in relation to outdoor recreation. The action items listed with each goal are steps to assist in accomplishing the goals and meeting the desired outcomes. The desired outcomes are the intended results of achieving the goal and subsequent action items. Desired outcomes are ultimately used as an evaluation of success.

Because every community is at a different stage in their outdoor recreation pursuits, it's helpful to show a progression of action items within each goal. The action items are outlined by level of complexity from basic, intermediate, and advanced action items. Although each action item and desired outcome are important, there is one highlighted desired outcome within each goal that was identified by the SCORP Advisory Board as the ultimate strategic direction Nebraskans should take to work toward achieving a better understanding and appreciation for outdoor recreation. Action items marked with a green leaf directly relate to the highlighted desired outcome to show that no matter where you are in your outdoor recreation pursuits, you can continue to work toward Nebraska's strategic direction by focusing on the action items identified. Many of the other action items under each goal can be achieved in concert with one another, so the items identified with a green leaf are only a starting place.

ACTION PLAN

# Outdoor Recreation Goals for Nebraska

1. **Improve Quality of Life by Promoting Healthy Lifestyles through Outdoor Recreation**

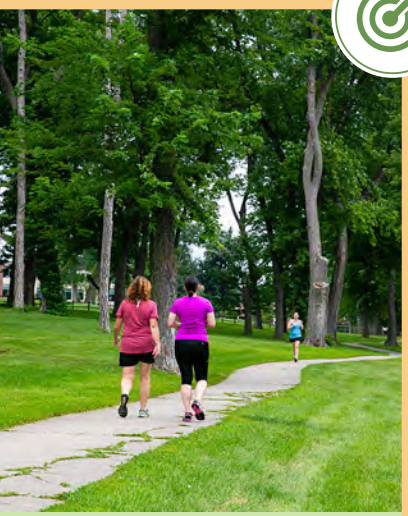
2. **Develop the Understanding, Appreciation, and Engagement of Nebraska's Natural Resources and Outdoor Recreation Opportunities**

3. **Understand the Opportunities and Threats in Developing Urban Areas and Areas of Rapid Population Growth**

4. **Provide and Manage Outdoor Recreation Education Opportunities that are Effective and Inclusive**

5. **Provide Effective and Inclusive Outdoor Recreation Programming**

6. **Provide and Manage Outdoor Recreation Opportunities that are Sustainable and Ensure Economic Vitality**



*Runners and walkers at Elmwood Park in Omaha. (Douglas County)*

# GOAL

**Goal 1: Improve Quality of Life by Promoting Healthy Lifestyles through Outdoor Recreation**

Numerous studies have shown spending time outside recreating not only promotes physical fitness but also improves mental health. More and more doctors are prescribing walking in the park or within nature based settings to help treat symptoms of depression and anxiety, and to improve physical ailments and chronic diseases. Improvements to quality of life also is correlated with outdoor recreation and a healthy state of mind. These factors come into play when communities are planning for park and trail infrastructure.

# DESIRED OUTCOMES

- Public is aware of and has access to outdoor recreation areas.
- Partnerships are identified and formed with community centers and organizations to enhance quality of life through healthy living.

**Public understands and appreciates the correlation between outdoor recreation and public health.**

- All user groups are part of the public participation process in developing and enhancing healthy lifestyles through outdoor recreation programs or events.
- Diverse groups and underserved populations have access to healthy lifestyle outdoor recreation opportunities.
- Increased understanding of healthy lifestyle programs through evaluations to guide future efforts.

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

*Climbing the wall at the Outdoor Discovery Program at the Trails West YMCA Camp. (Scotts Bluff County)*

# ACTION ITEMS

## Basic Actions

- **Increase information and awareness.** Increase information and awareness about close-to-home and readily accessible outdoor recreation opportunities for all.

- **Create an inventory of community centers and groups that exist in your area.** Inventory organized community groups in the area and encourage outdoor sports and recreation to individuals, workplaces, community groups, and schools to become physically active.

- **Connect amenities and trails.** Consider connectivity of trails when planning for outdoor recreation amenities.

## Intermediate Actions

- **Be inclusive and go to your people.** Be inclusive in your efforts by providing how-to clinics in park spaces to teach the public about wildlife, natural resources, and different sports that are accessible and offered in more than one language to encourage diverse populations to participate. Cultivate physical activity support groups such as running clubs, bike ride groups, or outdoor yoga groups to get people outside and recreating.

*Hiking in the fog at DeSoto Bend National Wildlife Refuge. (Washington County)*

- **Educate about the connection between outdoor recreation and health.** Educate the public on health benefits of outdoor recreation activities, such as walking, biking, nature viewing, working in partnership with doctor's offices or health care providers, and providing informational pieces to schools to educate youth.

## Advanced Actions

- **Create structured and unstructured opportunities to encourage physical activity.** Create more structured and unstructured opportunities for all user groups to engage in outdoor activities in park settings, trails and neighborhoods such as planned programs and events or stand-alone walking trails and obstacle courses.

- **Promote healthy lifestyles through programs and evaluation of programs by involving the public in participation processes.** Construct outdoor classrooms, trails and playgrounds featuring outdoor recreation skills to promote healthy lifestyles and follow up with regular evaluations to ensure lifelong recreational activities can occur for all ages.

# HOW-TO

**How do I promote healthy lifestyles?**

Public participation is a vital component of creating buy-in for promoting projects that will benefit healthy lifestyles, but it's difficult to know where to begin. It's all about starting with a vision. Creating your vision statement should define what you're trying to achieve and the purpose of the project.

Once you have identified your vision, start thinking about your message to your stakeholders and why their involvement is important. Consider jotting down what exactly you're trying to achieve by involving stakeholders and the type of public participation you're looking for. Ask yourself the following questions:

- Am I trying to inform them about decisions, consult them for their opinions about the decisions, involve them in the decision-making process, collaborate with them by getting their input throughout the entire decision-making process, or empower them to make decisions about the project? Each of these pieces require varying levels of public participation, and it's important to ask yourself what level of participation is relevant for your project. Once you've identified the level of participation appropriate for your project, consider the following questions.
  - » Do I want a formal or informal public participation process?
    - *Formal (expensive)* – Hire a firm to help you conduct surveys and gather input from constituents.
    - *Non-formal (typically free aside from labor and data crunching)* – Ask your constituents for input in a non-formal meeting like a school gym or local café.
  - » Do I want smaller focus groups, an advisory committee, and/or other form of stakeholders?
  - » Do I want to have one-on-one sessions with individuals to gain input?
  - » Do I want to have surveys done within the neighborhood at parks, should I go door-to-door, attend community events, go to organizations, or send an electronic survey?
  - » Do I want stakeholders to assist in the longevity of the project (e.g. cleanup days, maintenance and fundraising campaigns)? How should I start planting that seed now through their input and engagement in the planning process?
- Once you have identified why you need buy-in and public participation and the type of public participation you're interested in having for your outdoor recreation project, think about who should be involved in your planning process. Start by jotting down age groups and your intended users of the completed recreation project.
- Now that you have a list, start reaching out to groups, businesses, stakeholders, and community leaders to start the public participation process.

## DON'T FORGET!

Don't forget to recognize "community champions" in your planning process – it's important to get people involved at the very onset of your planning efforts so they're bought into the process and can be a voice for helping get community or stakeholder buy-in throughout the project. Those stakeholders (community members, avid users of the space, donors, etc.) can advocate for success of the project. Check out the success story at West Point and how they created community champions for their trail system.

# SUCCESS STORY

*Walking and biking trail in West Point. (Cuming County)*

**Trails in West Point**

West Point, Nebraska, a community of about 4,000 people, has leveraged it's tremendous support system to expand opportunities for their residents through several projects. In 2015, the City of West Point, in cooperation with the West Point Trails and Pathways Committee and the West Point Community Foundation, initiated a City Trails Program to start the journey of developing a trail system in West Point. The impetus behind the trail system was to promote physical fitness and create a culture of healthy lifestyles throughout the community. Connectivity with other resources such as the school and community centers also were a component. An ad-hoc committee of just four community members was created to discuss how this trail system would become a reality. From there, public participation through phone calls, mailings, and focus groups were used to develop multiple partnerships with community organizations, business leaders, and schools to ensure this project was holistic of all user groups, which was a key component in the success of this project.

There are four phases to this trail system, three of which have been completed with approximately 99% of funding through private donations. This is no small order with the costly development of trail systems. One of the ways West Point encouraged people to donate was by creating events, such as the Trails Walk, specifically targeting individuals 30 years of age and younger to participate. Participants were asked to donate $100 per year for five years to help fund the trail. This raised approximately $40,000 and has built a foundation of lifelong ownership within the trail system by many youth and young adults. Volunteers from schools have offered their services to help with litter cleanups along the trail corridor. Buy-in from the City Council within West Point was at the forefront of this initiative to ensure they were vested in the community support and drive for this recreation amenity.

This success story shows that a large community isn't necessary to make outdoor recreation opportunities a reality and the importance of community buy-in is instrumental in planning efforts to ensure a sense of ownership is created. Don't forget about the invaluable role community leaders play in being champions for outdoor recreation success. Are you a community champion? Why not harness that energy toward your next outdoor recreation success story?

*Discovering nature in Crawdad Creek at Platte River State Park. (Cass County)*

# GOAL

**Goal 2: Develop the Understanding, Appreciation, and Engagement of Nebraska's Natural Resources and Outdoor Recreation Opportunities**

Having a plan for understanding, appreciating, and engaging constituents in Nebraska's natural resources through outdoor recreation opportunities requires maintaining and expanding our resources in all areas of the state. Conservation of natural resources protects the natural environment for the future and provides outdoor recreation for Nebraskans. Outdoor recreation-related entities have the most influence and ability to protect natural resources, while utilizing them for outdoor recreation related purposes. Making the public aware of the state's biodiversity will enhance conservation by increasing knowledge and acceptance of resources that benefit all. Providing ample opportunities for constituents to learn about and be supported in their outdoor recreation endeavors is critical to ensuring this goal is met. Creating citizen advocacy for natural resources and outdoor recreational opportunities will benefit the public's health, encourage commitment of resources toward outdoor recreational development, and ensure quality of life of community members for generations to come.

# DESIRED OUTCOMES

- Data pertaining to existing and potential areas for outdoor recreation is readily available for providers of outdoor recreation to access.
- SCORP data are used as a resource for understanding demand, supply, and demographic information.

**Public understands, appreciates, and values Nebraska's natural resources and outdoor recreation opportunities.**

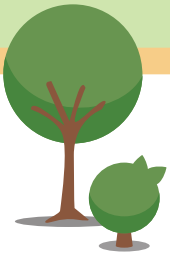
- Public understands the importance of promoting outdoor recreation to policy-makers and government officials.
- A broad network of partnerships is established to assist in holistic outdoor recreation decision-making.

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

*Learning about aquatic wildlife at the Fort Kearny Outdoor Expo. (Kearney County)*

# ACTION ITEMS





### Basic Actions

- **Inventory existing and potential areas for recreation when updating community plans.** When creating or updating your comprehensive plans, you should not only inventory the existing recreation sites, you should also map out a general location for future parks and trails. Communities should also identify areas of ecological concern to protect them from future development.

- **Use SCORP data to assess outdoor recreation preferences.** Use current data within SCORP to assess outdoor recreation preferences by socio-demographics and modify any planning documents necessary to address the findings. Share data with outdoor recreation providers to use in developing local plans and programs that are in line with your goals.

**Market your message.** Find opportunities to share environmental ethic messages with constituents, such as land stewardship, responsible use, Leave No Trace, Tread Lightly!, Play Clean Go, and Pack It In Pack It Out.

### Intermediate Actions

- **Research and pursue partnerships.** Pursue partnerships with other communities to alleviate redundancy of facilities in a region and expand opportunities available to your users.

- **Expand partnerships to protect natural resources and outdoor recreation.** Consider working with multiple partners to manage resources and involve them in public participation processes to protect wetlands, streams and rivers, prairies and forest ecosystems, and water trail corridors.

***Potential Partners:*** *Natural Resource Conservation Service, Nebraska Land Trust, Nebraska Environmental Trust, Audubon Society, Rainwater Basin Joint Venture, The Nature Conservancy, World Wide Fund for Nature, Ducks Unlimited, Sierra Club, Wildlife Conservation Society, National Wildlife Federation, Natural Resource Defense Council, Chamber, Kiwanis, Elks, and Legion*

**Promote conservation of green space as development occurs.** Promote the development of residential areas that retain green space or natural areas, include recreation facilities, and provide safe pedestrian access to public parks from schools, businesses and retail centers. Ensure the conservation of native ecosystems and biological communities are considered when planning for recreation.

### Advanced Actions

**Promote outdoor recreation to government officials and partners.** Promote outdoor recreation as a priority with policymakers, planners, practitioners and partners by providing interpretation, education, and programs that expand knowledge and appreciation of Nebraska's recreational and natural resources.

- **Correlate planning documents to promote inclusivity of outdoor recreation efforts.** Correlate planning documents so they work in concert with one another (e.g., so that a transportation plan does not recommend going through a naturally sensitive area). Incorporate protection of the biodiversity of the resources into outdoor recreation facility management and operation plans.

- **Share data and case studies with other outdoor recreation providers.** Provide outdoor recreation providers with best practice models and case studies for recreation planning, including models for natural resource stewardship and sustainability to encourage collaboration.

# HOW-TO

**How do I start to build partnerships?**

- Start by asking yourself what groups already exist in your community. Consider all community groups; not only ones that are interested or have obvious connections to outdoor recreation endeavors. Dream big and think outside of the predictable list of partners. The business community may not be a direct connection, but many times businesses are engaged civically throughout the community. Make a list.

- Then, prioritize the list and work systemically through it to reach out to engage many in your project. More connections will create more buy-in and support for your endeavor.

- Do your homework on what the interests are of the potential partner and tailor your story to what speaks to their goals, mission, or vision of the community.

- Before reaching out to the groups, consider what the best approach would be based on the type of organization you're dealing with. A health organization should be approached one way, whereas a business should be approached another. Creating talking points and strategies ahead of the "ask" will create a pathway to success. You might consider organizing key players from the health organization to meet in person to discuss your objectives. Whereas, for the business, you might consider taking the owner or employee out for coffee to discuss what they do and how their input on the project could be helpful for their business and the community.

- When you are ready to reach out to community groups, don't forget to sell your recreation story you're trying to tell for your area. If it's creating a trail to connect the school with the local park to enhance walkability, connectivity, healthy lifestyles, and a safe-haven for children to travel after school, make that known! That way the organizations you're reaching out to understand that you've thought a lot about the success of this idea and why it would benefit your community. This can go a long way when trying to build strong partnerships with community organizations.

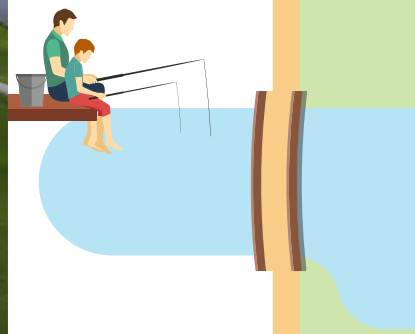
- Network with your current partnerships about potential new groups to approach.

*AmeriCorps team painting the Trading Post at Chadron State Park. (Dawes County)*

## DON'T FORGET!

Don't forget to consider the partnerships you can build with corporations in your area. For example, if you have an irrigation company or meat rendering facility that employs many members of the community, consider reaching out to them. Sell your vision to encourage them to be part of the planning and development process by becoming a donor or dedicating staff to help with clean-ups and repairs of the recreation amenity a few times a year. Many successful outdoor recreation opportunities can be created when you invest in building strong partnerships.

# SUCCESS STORY



*Swan Lake Reservoir near Tobias. (Saline County)*

**Lower Big Blue Natural Resources District Lake Restoration**

Outdoor recreation areas throughout the state are renovated every year. Some are renovated for flood control purposes; others have sedimentation and pesticide issues that result in less wildlife habitat or recreation opportunities for users. In 1998, Swan Lake Reservoir (Willard Meyer), located in the Lower Big Blue Natural Resources District (LBBNRD), was listed as an impaired waterbody due to high atrazine pesticide levels. The LBBNRD partnered with several local, state, and federal agencies to create a Watershed Management Plan that involved a Community Based Planning process. This community-led process brought an opportunity for LBBNRD, which owns Swan Lake Reservoir, to work with landowners to implement control measures that would improve the water quality of the reservoir.

Through the course of the project, no-till, nutrient, and pesticide management practices were implemented in surrounding agricultural lands to reduce nutrient loading within the reservoir. This led to the reservoir being removed from the impaired waters list in 2006. This project is worth noting because it was a success in more than one way. Not only were strong partnerships built with landowners and other agencies, but funding was established through many forms. One of the funding opportunities was through a Section 319 grant. Section 319 funding is from the Nonpoint Source Management Program, which was designed to assist in specific nonpoint source implementation projects.

Upon completion of the renovation, a kids fishing derby was established, bringing in more than 200 youth annually over the past 18 years. This event receives a lot of support by the adjacent landowners because they also were involved in the renovation project that took place at Swan Lake Reservoir. This is a prime example of how partnerships and early buy-in of your constituents can lead to long-term success of your outdoor recreation resources.

*Aerial view of Auburn, including baseball, softball, soccer fields, and campground. (Nemaha County)*

# GOAL

**Goal 3: Understand the Opportunities and Threats in Developing Urban Areas and Areas of Rapid Population Growth**

Most of Nebraska is rural. However, rapid growth and urbanization can make it difficult to meet the outdoor recreation needs of any population. As urban areas continue to expand in the eastern portion of Nebraska and along the I-80 corridor, competition to protect natural resources becomes difficult. Some of the threats from urbanization include the continued loss of agricultural and outdoor recreation lands, loss of habitat, and decrease in water quality. Large scale growth presents opportunities for an expanded tax base and the creation of new park and recreation areas. While this mainly applies to the Metro Region, there are several other cities that are experiencing growth, such as Norfolk, Grand Island, Kearney, Hastings, Columbus, and North Platte, that could impinge on greenways, prairies, and park areas.

# DESIRED OUTCOMES

- Maps and data are available to effectively evaluate potential for outdoor recreation within developed areas.
- Public advocates for green space in developed areas.
- Public has active and passive outdoor recreational opportunities available to them.

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

**Public understands and appreciates the need to conserve green areas for ecological health and outdoor recreation opportunity.**

- Connectivity of amenities is fulfilled through development of extensive trail networks within communities.

*Playing on the merry-go-round at Wilson Park in Chadron. Wilson Park has been funded by the LWCF. (Dawes County)*

# ACTION ITEMS

### Basic Actions

- **Evaluate multi-modal transportation for outdoor recreation opportunities.** Evaluate existing transportation infrastructure for multi-modal opportunities to encourage outdoor recreation forms of travel (e.g., walking, cycling, etc.), specifically when expanding commercial, industrial and residential development.

- **Balance between development and green space.** Encourage communities to develop park and open space plans that provide a balance of recreational opportunities, such as the development of various types of ballfields and open natural areas when urban development occurs.

- **Promote green space for new developments.** Promote the creation of parks and trails when large neighborhood developments are proposed.

*Biking on city trails.*

### Intermediate Actions

- **Ensure parks provide opportunity for active and passive uses.** Provide and expand community parks for multiple uses, including both active and passive uses, as populations grow, such as sports courts and open fields to fly kites.

### Advanced Actions

- **Connect amenities via trail.** Connect park areas to community centers, schools, and other public resource centers via trail to ensure a level of connectivity that addresses the potential of urban sprawl and development.

- **Include natural areas within densely developed corridors.** Incorporate natural prairie areas within densely urban environments with self-guided interpretive elements.

- **Develop extensive trail networks connecting suburbs and rural areas.** Develop trail networks that offer easy access throughout the community and to rural areas.

- **Develop active outdoor facilities to encourage recreation.** Develop and provide active outdoor facilities such as athletic fields, sports courts, and playgrounds as demand warrants.

- **Ensure green space is inherently included in plans for newly developed areas.** Green space and recreation areas within planning documents ensure developers absorb the cost of recreation opportunities in their new subdivision designs.

# HOW-TO

**How do I evaluate our existing facilities and create the right mix of recreation within the community?**

- Start by inventorying your existing infrastructure and maintenance items for that infrastructure. Use an Excel spreadsheet, Access database, or other technology to document the information in one place.
- Conduct a condition assessment to understand what condition your infrastructure is in. The internet has a ton of examples.
- Determine what items you need and those you can surplus, sell, transfer, repurpose or get rid of.
- Identify gaps that exist within your infrastructure based on your assessment.
- Do your research and identify trends and new outdoor recreation opportunities happening regionally, nationally, and even internationally.
- When you are ready, reach out to your community to ask them pertinent questions about what they would like to see offered on the recreation landscape. Provide specific examples from your research that range from simple to complex ideas so that your users can give you feedback on what would align with their preferences.
- Determine if what your users want is feasible given your budget and determine if you can provide something similar that will still satisfy your users (e.g., splash pad vs. pool).
- To ensure you have the right mix of recreation, ensure your planning process involves reaching out to all user groups to determine what they want.
- From here, you can look at what you have, determine where those gaps are, what your user groups want, and evaluate your financial situation. If your financial situation does not allow you to provide amenities the community wants, start building partnerships, which might lead to interested donors (see "How to start building partnerships" under Goal 2 for more information). You may also want to consider the funding opportunities discussed in the "LWCF Priorities" section at the end of this chapter.

*Birding and wildlife viewing at Ponca State Park. (Dixon County)*

## DON'T FORGET!

Don't forget to consider your older populations and the mental health benefits outdoor recreation can have on them. Being outdoors can increase physical and mental health, and increase social interaction. Retirement communities, nursing homes, and assisted living facilities are all great partners to think about.

# SUCCESS STORY

*Pickleball courts in Lincoln. (Lancaster County)*

**Lincoln Pickleball Courts**

Pickleball is a paddle sport, similar to racquetball, which combines the elements of tennis, badminton and table tennis. In recent years, pickleball has gotten a lot of attraction around the nation as a sport for all ages. In 2015, the Lincoln Parks and Recreation Department caught onto this trend after being approached by older community members interested in having courts in south Lincoln near their homes. Since then, the nonprofit known as Pickleball Lincoln, Inc. has conducted two fundraising campaigns to build pickleball courts. Lincoln Parks and Recreation helped facilitate the process with the community by coordinating efforts with the Lincoln Parks Foundation. The campaigns were such a success that in 2016, three existing tennis courts were converted to six permanent pickleball courts, followed by construction of an additional four new courts that opened in 2020.

With the city of Lincoln continuing to grow and expand, additional outdoor recreation space in developed or undeveloped areas can be difficult to achieve. The Lincoln Parks and Recreation Department has gotten creative by using the pickleball court projects as a springboard for searching for other ways to incorporate this sport into existing park infrastructure. So far, six existing tennis courts have been identified as suitable multi-use courts for tennis and pickleball by adding double striped paint to the court surface, allowing for dual recreation use on the same court.

Through this project, the City discovered that pickleball is a very social sport that requires multiple courts in a single location so the groups don't have to divide their social gatherings throughout the city at different parks. The older community was instrumental in communicating their needs with the City to ensure the demand for this recreation opportunity was met. They continue to be an active partner by maintaining the courts and supporting the City with future pickleball court developments. Pickleball Lincoln, Inc. has made it their mission to encourage others to participate in this sport by fostering the growth of a unique and inclusive community focused on fun, fitness, and friendship. This is a great example of how engaging with your community can build community champions that are vested in the resources you offer.

*Surveying macroinvertebrates at a bioblitz at Chadron State Park. (Dawes County)*

# GOAL

**Goal 4: Provide and Manage Outdoor Recreation Education Opportunities that are Effective and Inclusive**

Outdoor education is in high demand in Nebraska. Communities can take advantage of this by providing outdoor recreation education as part of their school curriculum. It is particularly important for urban populations that have lost many of the opportunities to practice outdoor skills on a regular basis. Teaching environmental ethics is an important way to instill the "land ethic" philosophy in all outdoor users, and gives the public another way to connect with the natural resource. Although governmental, non-governmental entities, and communities have made great strides to enhance the outdoor recreation education opportunities and resources available to the public, there is more work to be done. Communities should consider the action items below for this goal to enhance their outdoor educational opportunities for all users.

# DESIRED OUTCOMES

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

- Outdoor recreation education opportunities are established through collaborating with all user groups.
- **Public understands and appreciates outdoor recreation education opportunities available to them and participates in them.**
- Public is actively engaged in a variety of outdoor recreation education activities in an ethical and responsible manner.
- Educational institutions have outdoor recreation education resources available to students in a variety of platforms (e.g., classrooms, virtually, camps, courses, etc.).
- Public is satisfied with outdoor recreation education opportunities.
- Education programs are inclusive of all Nebraskans.
- Funding opportunities are available and used for expanding outdoor recreation education opportunities for all SCORP regions.

*Fly-fishing at Conagra Lake in Omaha. (Douglas County)*

# ACTION ITEMS

### Basic Actions

- **Expand awareness about outdoor recreation education across all user groups.** Expand awareness of the importance of outdoor recreation education opportunities across user groups (e.g., students, educators, families, seniors, young children, underserved populations) through various media platforms and how-to clinics.

- **Encourage collaboration.** Encourage collaboration among environmental education providers, such as groups, organizations, and natural resource agencies, when creating project goals (e.g. National Recreation and Park Association, Fish and Game agencies, environmental friends groups).

- **Use guidance documents for outdoor recreation education efforts.** Use resources within the NGPC Education Strategic Plan to guide outdoor recreation education efforts where applicable.

### Intermediate Actions

- **Market natural play and outdoor classrooms.** Provide emphasis on natural play and outdoor classroom environments through marketing efforts. If you do not have these in your community, consider creating them as a less costly investment compared to traditional playground equipment (see Natural Playscapes Guide on page 55).

- **Provide opportunities for students and adults to engage in citizen science programs.** Examples include helping gather data regarding Nebraska's wildlife species or classroom service learning projects about native species, biodiverse habitats, climate change, and how to protect natural resources for the future.

- **Educate diverse audiences.** Educate diverse populations about outdoor recreation ethics, and create programs that are welcoming to all cultures with content the participants can relate to.

### Advanced Actions

- **Encourage the next generation of stewards of the outdoors.** Encourage youth and young adults to participate in outdoor recreation activities to create the next generation of stewards of the outdoors.

- **Create mentoring programs to encourage outdoor recreation enthusiasts.** Mentoring programs can encourage the next generation of outdoor recreation users with resources from partners such as NGPC's youth mentoring hunts, Take 'Em Hunting and Take 'Em Fishing campaigns.

- **Provide more courses in natural resource education in primary, secondary, and post-secondary schools.** Increase the number of formal educators who will incorporate environmental education into curriculum. Work with school administrators to develop a greater appreciation and support for environmental education in the classroom.

- **Explore other avenues of creating and disseminating outdoor recreation education resources.** Continue to develop Nebraska-specific resources for citizens, families and educators, including informational web sites, classroom curriculums, printed materials, and outdoor classrooms teaching about natural ecosystems and wildlife.

- **Increase funding for education projects and programs.** Funding for education projects and programs can assist schools and teachers in meeting state standard requirements through the use of nature-based concepts. Consider how the programs will aid in offering affordable outdoor education options for low-income families.

# HOW-TO

**How do I get more nature-based or natural resource science education happening in my community?**

As a community member or recreation professional, you may have experienced the difficulty of trying to get into schools to teach children about nature and natural resource education to get them outdoors. However, there are ways to encourage youth and young adults to explore and understand the value of nature-based or natural resource science education. Below are a few tips on how to get started.

- Work with local parks departments to install interpretive signage focusing on natural resources, wildlife or nature along trails or park walkways.
- Offer virtual learning opportunities or take advantage of the NGPC Virtual Educational Opportunities that have been created due to COVID-19 at OutdoorNebraska.gov/OnlineEducation
- Coordinate a community-wide challenge to spend 10 hours per week outside. Participants will be entered in a chance to win a prize.
- Develop a summer to-do outdoor recreation and education list for children. Children who complete at least 10 outdoor learning activities will receive a prize or be invited to an end-of summer pool party.
- Coordinate and implement a family nature night with the local school, after-school program, community center, church or civic organization.
- Host parent-child workshops within the park to encourage parents to explore nature with their children.
- Work with summer programs, after-school programs or schools to implement more conservation or nature-based education in their programs and curricula.
  - » For more information on conservation or nature-based education, visit NebraskaProjectWild.org.
- Plan and implement a community bioblitz to take place in a local park or nearby state park; or coordinate a community-wide bioblitz, which includes the whole town or surrounding communities.

> ***What is a bioblitz?*** *A bioblitz is where groups of scientists, naturalists, and community volunteers survey living species within a designated area over a specified time frame. For more information on bioblitzes, visit OutdoorNebraska.gov/Bioblitz.*

- Work with local parks departments or community groups to create an outdoor classroom in a public park. Outdoor classrooms are more than just a playground – they include weather stations, areas for exploring natural phenomena, equipment for natural discovery, table and chairs for further investigations, etc. For more information on outdoor classrooms, visit NebraskaProjectWild.org.
- Work with local experts or surrounding communities to teach classes focusing on outdoor recreation, natural resources or conservation education. Classes could be taught at the local community center, library, school, after-school program or summer camp.

Don't forget to include your youth when conducting survey efforts and getting input from your stakeholders. Youth can have different preferences, as indicated in the youth pilot studies outlined in Chapter 4. It's important to account for those differences in your outdoor recreation planning process.

## DON'T FORGET!


*Winners and runners-up of the 2018 Kayak Kids Essay Contest at Red Willow Reservoir State Recreation Area. (Red Willow County)*

# SUCCESS STORY

## State Parks Kayak Kids Essay Contest

In 2013, an innovative idea was generated from a Temporary Park Superintendent in the Southwest Parks Region to start a kayak essay contest. The Regional Park Superintendent used this valuable input and assisted in bringing the idea to life. This annual Kayak Kids Essay Contest was created to encourage youth to get outdoors. The competition requires contestants to submit a 250-word handwritten essay expressing why growing up in the outdoors is important. They must also take a photograph of themselves at one of the Southwest Parks Region reservoirs. There are two age divisions, 10-14 and 15-18 years of age, and all essays are judged by Nebraska Game and Parks staff from all agency divisions. The winner from each age division receives a grand prize package that includes a kayak, paddles, and life jacket. Runner-up prize packages for each age division includes a new rod and reel combo. The NGPC Parks Division personnel help get donations from businesses to fund the prize packages each year and host an annual awards ceremony at Red Willow Reservoir State Recreation Area. The sponsors, kids, and their parents are all invited to participate.

This initiative has sparked a new way of bringing youth to outdoor recreation areas by getting them to think about why outdoor recreation is important. The pathways of getting youth to participate in outdoor recreation is imperative because they are the next generation that will conserve and protect our natural resources. The creation of this annual contest from grassroots efforts is a great example of a success story where input from staff was used to generate a great opportunity. Through sound leadership and collaboration, this contest has become a very popular part of the Southwest Parks Region.


*Fishing at Eugene T. Mahoney State Park. (Cass County)*

*Bowfishing at the Platte River State Park Outdoor Discovery Program. (Cass County)*

# GOAL

**Goal 5: Provide Effective and Inclusive Outdoor Recreation Programming**

Programs for outdoor recreation are considered an essential element of providing constituents with the opportunity to understand and engage in the benefits of natural resources. Outdoor recreation programming has to do with outdoor skills-based programming opportunities (e.g., teaching user groups about wildlife and how to fish, kayak, hunt, or use a bow). Many communities are offering programs and events at their parks centered around different sport tournaments and fairs to encourage people to get outdoors. However, programs encouraging and promoting outdoor skills such as how to use a bow, atlatl, tomahawk, and learning about wildlife should also be considered.

Additionally, it's just as important to be aware of the needs of constituents to ensure programs offered are not only effective, but inclusive to all demographics. To ensure programs are effective, consider evaluating them on a regular basis to see how they may be improved or adjusted to meet the needs of your audience. Be inclusive in your efforts when offering outdoor recreation programs. Don't forget to offer translators or material in multiple languages to encourage diverse populations to attend your programming. Consider the action items below to ensure outdoor recreation programming is effective and inclusive.

# DESIRED OUTCOMES

- Existing outdoor recreation programs and gaps that exist are identified.
- Programs are effective and inclusive in engaging the public in natural resource and outdoor skills education.
- Awareness of trends and opportunities to improve existing programs are identified and utilized.

**Public understands and appreciates the need for outdoor recreation programs.**

- Programs offered are inclusive and welcoming for all user groups.
- Partnerships for public participation and input are incorporated in decision-making for outdoor recreation programming.
- Partnerships for funding are established.

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

# ACTION ITEMS

### Basic Actions

- **Evaluate existing outdoor recreation programs.** Ensure outdoor recreation programs and gaps are identified. Determine if they are effective and inclusive in natural resource and outdoor skill based education.

- **Trends and opportunities.** Identify new trends and opportunities for outdoor recreation programming efforts in park areas, natural areas, and green corridors within and beyond urban and rural environments.

- **Public participation.** Gather input from specific demographic groups to enhance programming related to historical and cultural aspects of Nebraska populations.

### Intermediate Actions

- **Increase awareness.** Expand awareness of importance of outdoor recreation programming opportunities across all user groups.

- **Support partnerships among different organizations.** Support joint outdoor recreation programs among partners (e.g., schools, government, and communities, churches, businesses, non-profits) to promote programs.

- **Ensure program opportunities for all.** Provide events and outdoor recreation opportunities for diverse audiences.

- **Assess and evaluate how to improve programs.** Develop baseline knowledge and understanding of how programs effectively meet the needs of constituents. Evaluate demographics so you can be inclusive and know what you might need to do (e.g. brochures and material in multiple languages, accessible to all socio-economic groups).

*Boy Scouts Tree Planting at Fort Robinson State Park and Wildlife Management Area. (Dawes County)*

### Advanced Actions

- **Partnerships and funding.** Identify partnerships and funding sources for parks and outdoor recreation programming.

- **Promote environmental stewardship.** Promote and foster a stewardship ethic among all user groups through education programs in schools and park areas.

- **Increase knowledge and appreciation for recreation resources.** Provide interpretation, education and outdoor recreation programs to expand the knowledge and appreciation of our natural, cultural, and recreation resources that are consistent with conservation efforts.

- **Stay on budget when developing programming efforts.** Develop self-guided or self-directed learning opportunities for all audiences that do not require additional resources outside the scope of the budget.

# HOW-TO

**How do I start making my programming more equitable, inclusive, and effective?**

Start by building trust among your community members and parks and recreation agencies through public engagement. Acknowledge past experiences, involve local community leaders and partners, and be transparent and deliver on what you have promised. Routine follow-up with community members involved is also important to ensure they're aware of programming efforts that are coming to fruition. Consider these other pieces as you start to make your programming more equitable, inclusive, and effective:

- Evaluate your current programs – are they meeting the objectives, satisfaction levels, and desired outcomes of your constituents? How many participants are you reaching? Are you engaging your intended audience?
- Consider evaluating the environmental, physical, social and economic health of your community to give you a baseline of information to start creating programs that fit the needs of your unique community.
- Reach out to your constituents to see what they want to understand the demographic make-up of the area and determine if you are being inclusive of all abilities, ages, races, and ethnicities.
- Increase community participation in your parks and public spaces.
- Create a plan with clear goals in mind – always know what your vision is, then broaden the vision with input from the community to ensure your programming efforts are effective and inclusive.
- Assess your staff capacity – do you have a couple of staff members that can dedicate time toward community engagement to ensure your programming efforts are inclusive and equitable?
- Secure funding – budget for community engagement activities in every phase of your project, including stipends or gift cards for community participants.
- Build leadership support – demonstrate to your leadership why community engagement is important to the community, but also the long-term success of projects. Encourage leadership within your agency and your community (e.g. mayor, city council representatives) to join your community events to show their support for the project.

*Volunteer actors re-enact life at an 1870s era frontier fort at Fort Hartsuff State Historical Park. (Valley County)*

## DON'T FORGET!

Don't forget to build a sense of community ownership of the programming (refer to the Don't Forget section under Goal 1 in this chapter). Don't forget to make your programming, brochures, plans, and maps color-blind friendly.

# SUCCESS STORY

*Scanning the Great Park Pursuit post in Lake Maloney State Recreation Area. (Lincoln County)*

**NGPC Great Park Pursuit**

Given the challenging pandemic situation that began in 2020, providers of recreation are considering creative ways to encourage people to get outdoors. The Great Park Pursuit is a program that promotes active lifestyles, while increasing awareness of the state's nature-rich outdoor recreation opportunities by visiting park areas throughout the state. This program is a partnership between Nebraska Game and Parks and the Nebraska Recreation and Park Association. Teams of up to 10 people sign up online and then follow clues from the website or the Great Park Pursuit mobile app to find a program post located somewhere within one of the participating park areas. Once the post is found, the team can use the mobile app to mark their visit, or make a pencil impression of the post to prove they were there. A number of prizes are outlined as incentives to participate in the program. Although this program has been around since 2008, it offers an opportunity for families and close friends to participate in an outdoor adventure together without crowds and interaction with touched surfaces – because the participants use their own cellphones to participate. This not only reduces costs for park areas not having to provide equipment and materials for the program, but also allows the participants the flexibility to go out on their own time, without having to sign up for a particular time slot for the program. Several days can be set aside for this program throughout the summer, which allows for exploration to occur on more than one day. This program recently hit more than 1,000 teams in a single year. This is an example of how you can get creative with your programming to offer self-guided education opportunities for the public, even during some of the most challenging times. Consider how you might dream up creative programming opportunities by networking with surrounding communities and recreation organizations about what they're doing.

Sponsors of this program include: Nebraska Chiropractic Physicians Association, Papio-Missouri River Natural Resources District, and the Nebraska Association of Resource Districts.

*Hiking at Agate Fossil Beds National Monument near Harrison. (Sioux County)*

# GOAL

**Goal 6: Provide and Manage Outdoor Recreation Opportunities that are Sustainable and Ensure Economic Vitality**

Parks play a key role in the economic stability and growth in communities and the state as a whole. According to the latest estimates, the annual economic impact of outdoor recreation on Nebraska is $2.64 billion. When companies are looking for places to locate their business, one of the major factors they evaluate is quality of life for their employees. Parks, trails, and outdoor recreation opportunities are major drivers in determining the quality of life in a community and should be addressed in any major community or regional planning effort. This SCORP plan serves as a guide in helping all outdoor recreation providers engage in a planning process either as part of a larger comprehensive plan or individually for each park or natural area. The resulting plans can then be used for justification of funding through various grant programs, donors, or governmental appropriations to ensure economic vitality can be achieved for outdoor recreation efforts. The action items on the next page should be considered for this goal.

# DESIRED OUTCOMES

*Action items denoted with a green leaf are immediate recommendations directly related to this desired outcome.*

- Recreational gaps and needs related to economic sustainability and vitality are identified.
- **Public understands the clear connection between outdoor recreation and the economic and financial vitality of communities and the state to enhance quality of life.**
- Economic partnerships are established.
- Funding for outdoor recreation opportunities are identified and sustainable through current and future partnerships.
- A prioritized plan for economically viable outdoor recreation offerings based on available data is outlined.

*Morel mushroom hunting along the Missouri River. (Cedar County)*

# ACTION ITEMS

*Volunteers from the Nebraska Tourism Cares Project cleaning up debris on the Cowboy Trail. (Dawes County)*

### Basic Actions

- **Research and identify recreational gaps.** Research and quantify gaps that exist for recreation needs in each SCORP region based on changing demographics, population growth, and emerging outdoor recreation trends.

- **Research economic benefits.** Research the economic benefits of outdoor recreation in Nebraska and share this information with decision and policy makers to encourage support for the outdoor recreation industry.

### Intermediate Actions

- **Partnerships with a variety of sources.** Create partnerships with businesses, such as convention and visitor bureaus, recreation equipment vendors, and guide services that provide materials or services for outdoor recreation.

- **Partnerships that address more than one need.** Create partnerships that carry out multiple activities, such as fundraising and promotion of outdoor recreation events.

- **Advocate for grant programs.** Advocate for the continuation of state funding assistance through the LWCF and other federal programs such as Recreational Trails Program (RTP) with legislative bodies and congressional members that support outdoor recreation in Nebraska and ensure projects are economically feasible for smaller communities.

### Advanced Actions

- **Promote day users and overnight guests through offerings and marketing efforts.** Promote outdoor recreation events, programs, and facilities that attract both day travelers and overnight visitors through marketing initiatives and media platforms.

- **Secure funding sources.** Work with partners, sponsors, and donors to secure match for cost sharing to leverage additional funds that make resources and staff time go farther.

- **Meet demand.** Integrate recreation opportunities to meet the demands of Nebraskans. Consider expanding camping opportunities and amenities that meet the needs of the ever-changing market (e.g., glamping, RV, primitive campgrounds with picnic tables and fire rings). Consider the economic contribution your community can receive by offering services to out-of-town guests using campgrounds and other amenities.

- **Maintain infrastructure.** Rehabilitate, update, and upgrade existing outdoor recreation facilities to maximize functionality and marketability.

- **Explore nontraditional funding sources.** Consider health agencies, local foundations and coalitions for recreational facilities and development to expand access for all users.

# HOW-TO

**How do I start to build a budget for my project?**

Curious about how to start building a budget for your project? Consider the following questions:

- Determine the goals and outcomes you want to achieve with the project. This will help you create a realistic budget to meet the expectations of the project.
- What materials will you need for the recreation amenity or area? Have you done some research on the costs of those items?
- What will the project labor costs be? Do you already have staff that can complete the job or do you need to hire a company?
- What kind of maintenance will be necessary to maintain the amenity or area?
- Do you have the right equipment to perform the maintenance?
- How much of your operating budget will be necessary to maintain the area and make improvements as features become worn down or need replaced?
- Who will be working at the site to maintain it (e.g. staff, volunteers, etc.)? This will help you determine cost of personnel to maintain the amenity or facility.

*You're never alone; contact other communities or Game and Parks to get valuable input on building a budget.*

Remember that partnerships lead to volunteer opportunities, which could reduce the amount of your budget spent on maintaining the area. Here's a short list of groups you could consider when starting your list of organizations to reach out to: schools, churches, local businesses, non-government organizations, corporations, sports clubs, etc.

*Playing at the Niobrara Outdoor Educational Rendezvous at Niobrara State Park. (Knox County)*

## DON'T FORGET!

Don't forget to think of ways you can reduce costs by upcycling old or discarded materials. You can use old tires for flowerbeds, or old barn wood to repurpose into a bench. This is important to think about when designing your recreation project.

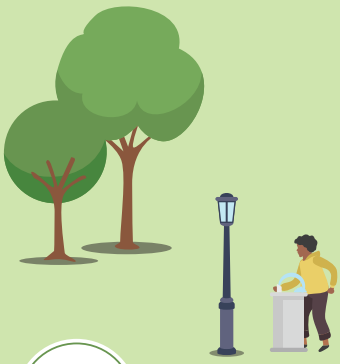
# SUCCESS STORY

*Day use picnic shelter at Mormon Island State Recreation Area. (Hall County)*

**Mormon Island State Recreation Area**

In 1960, dredging operations for producing fill material to build I-80 created the 46-acre lake that is known today as the Mormon Island State Recreation Area (SRA). The property was acquired by NGPC in the 1960s and opened to the public in 1970. There was a lot of demand from the public to offer additional recreation opportunities in this area due to its proximity to the community of Grand Island and visitors traveling through Nebraska along the I-80 corridor. The area offered camping, swimming, boating, and fishing, but it was somewhat limited. Therefore, throughout the 1970s, wildlife viewing, picnicking, and the first campground was built offering electric campsites in the main campground loop. Construction of the Cedar campground started in 2014 with additional electric camping opportunities lakefront campsites, which has been a huge attraction for visitors. This state recreation area is now one of the busiest in the South Central region of Nebraska and generates more revenue with the additional campsites and recreation opportunities. The picnic pavilion located in the Cedar Campground was built in fall of 2016. The amenity was made possible in partnership with the Hall County Visitor Bureau. One of Mormon Island's Park Superintendents applied for and received a grant in 2015 through the Hall County Visitor Improvement Fund. This grant did not require a match, which made this amenity a very worthwhile economic investment.

The Park Superintendent applied for another grant through the Visitor Bureau to construct a new playground in the Cedar campground. The grant did not fully fund the project, but NGPC leadership found matching dollars to ensure the project could be completed through internal funding mechanisms. The playground was completed in spring 2020. This story is a great example of how NGPC met the outdoor recreation preferences of their guests and how building partnerships with local organizations can lead to funding opportunities. Understanding preferences of user groups is imperative in making outdoor recreation opportunities successful. Never underestimate the power of soliciting input from your constituents to ensure projects have community buy-in and are vested in the resources you offer.



# DON'T FORGET!

## *Infrastructure is Important*

*One of the most desirable items Nebraskans want to see in outdoor recreation is more infrastructure near recreation amenities (e.g., support facilities, restrooms, drinking water stations, etc.). If your project is an infrastructure only project and you are seeking a LWCF grant for the project, your project could be more competitive if you tie it into one of the priority facilities listed to the right. If you have questions pertaining to the LWCF grant fund program, please visit [OutdoorNebraska.gov/LWCF](OutdoorNebraska.gov/LWCF) or contact the NGPC Alternate State Liaison Officer (ASLO) at (402) 471-5283.*

## LWCF Priorities

LWCF priorities give a direction for allocating funds for outdoor recreation projects over the next five years. The list of LWCF priority projects was created by evaluating the demand for top ranked public recreation amenities, programs, and facilities presented in Chapter 4. Providers of outdoor recreation should consider how their project may pertain to the LWCF priority project list and the SCORP goals when applying for an LWCF grant. Correlating the project with LWCF priorities and one or more of the SCORP goals will ensure Nebraska is working toward achieving the goals outlined in this plan and strategically planning for future recreation that meet the needs of Nebraska communities.

When applying for an LWCF grant, providers of recreation should consider how the supply and demand of particular amenities in their community correlate with the LWCF priority project list. Evaluating the condition of amenities and location of those amenities based on changes in demographics and demand, can help indicate the need and justification for additional facilities.

For example, if your community has several playgrounds, but through your survey efforts you have found there is a need for more, it is important to determine why that might be through surveying residents and conducting assessments of those amenities. It could be due to the playgrounds not being ADA compliant, dilapidated, and in locations with an aging demographic, resulting in an amenity that is unsafe or no longer used. Understanding the "why" behind your community needs is critically important when planning for future recreation. It is equally important to use this background information to strengthen your LWCF grant application. Use the resources and data presented in the SCORP to guide your justification in your grant narrative and to show the connection with the LWCF priority project list and goals for Nebraska.

*Sand volleyball at Harmon Park in Kearney. (Buffalo County)*

The LWCF priority projects will assist in the creation of the Open Project Selection Process (OPSP) of the LWCF, which is necessary for the LWCF application process. To ensure a competitive application, LWCF grant applicants should align their project with one or more of the areas outlined below.

- **Camping facilities**
- **Wildlife habitat viewing opportunities**
- **Picnicking facilities**
- **Outdoor recreation education-related facilities and partnerships**
- **Access to and opportunities for fishing**
- **Hiking/biking trails**
- **Playgrounds**
- **Swimming opportunities (both beach and pool)**
- **Adventure activities (e.g., zip line, rock climbing, floating playgrounds, etc.)**

These priority projects ensure that Nebraska's outdoor recreation efforts move forward in a way that is congruent with the input from the SCORP public participation process. This plan also recognizes the importance of local planning initiatives, and if a community is working on a project that doesn't clearly fall under one of the LWCF priority projects, please contact the Alternate State Liaison Officer (ASLO) to discuss opportunities for your project.

*Nebraska ASLO can be contacted at 402-471-5283.*

## "How-To"– Tips for Successful Grant Writing

- Read all the information available related to the grant for requirements, eligibility, etc.
- Contact the grant organization or administrator and ask questions to get a better understanding of the application or ask for feedback from the grantor on a draft application. You might learn more about the grant program and competitiveness of your proposed project by doing so.
- When providing all information related to the grant:
  - » Be concise and clear in the project description and need for the proposed project.
  - » Be aware of the "strings attached" to federal grants and what may be required of you throughout the grant cycle and once the project is complete. If you have additional questions, ask the grant administrator.
  - » List and describe where the matching budget funds will come from (e.g., local general funds, state grant funds, private donations from foundations or individuals).
  - » Only provide required information being requested and ensure you have buffered time into your project timeline for the grant application process, which can be lengthy.

*Visiting the falls at Smith Falls State Park near Valentine. (Cherry County)*

## Funding Resource Opportunities

Funding is one of the most important elements that ensures your vision of your outdoor recreation project becomes a reality. Here are some resources you should consider as you move forward with your outdoor recreation project.

*When drafting your grant application and designing your recreation amenity, don't forget about ADA standards and ensuring your amenity is accessible to all disabled populations.*

**Land and Water Conservation Fund (LWCF):** A federal grant funded by the U.S. Department of the Interior's National Park Service for promoting outdoor recreation and administered by the Nebraska Game and Parks Commission. Presented annually, pending federal funding.

Website: OutdoorNebraska.gov/LWCF

NGPC Grant administrator, 402-471-5283

**Recreational Trail Program (RTP):** The Recreational Trails Program (RTP) is funded by the Federal Highway Administration (FHWA) and administered by the Nebraska Game and Parks Commission. This fund is made possible by a portion of the federal motor fuel excise tax paid by users of off-road recreational vehicles such as snowmobiles, all-terrain vehicles, off-road motorcycles and off-road light trucks.

This fund is specifically for land acquisition for motorized or non-motorized trails, motorized or non-motorized trail development, trail-related support facilities and maintenance of both motorized and non-motorized trails.

Website: OutdoorNebraska.gov/RTP

NGPC Grant administrator, 402-471-5443

**Nebraska Environmental Trust (NET):** The Environmental Trust grant program is a state grant supported by the proceeds from the Nebraska State Lottery. The NET supports an array of projects related to promoting the preservation of Nebraska's natural resources. This can include prairie or outdoor classrooms for wildlife viewing, etc.

Website: EnvironmentalTrust.Nebraska.gov

Grant administrator, 402-471-5409

# HOW-TO

## *Find Funding Resources*

*Curious about other community resource opportunities? Do you want to build a natural playground or improve a pond? Thinking about wind energy or adding a fun educational element to your event? Need funding resources for your vision? Check out the NGPC Community Resource page for more information: OutdoorNebraska.gov/CommunityResources.*

**Civic and Community Center Financing Fund (CCCFF):** The Civic and Community Center Financing Fund (CCCFF) grants are state grants awarded to municipalities and administered by the Nebraska Department of Economic Development (DED) to encourage and foster quality of life in our communities.

A CCCFF grant may be used to construct and/or improve recreation and wellness centers, gathering spaces (e.g., swimming pools, open space facilities, etc.). The grant also may be used for preliminary planning related to the development or rehabilitation of eligible projects.

Contact the administrator to see if your project might be eligible.

Website: Opportunity.Nebraska.gov/CCCFF

Grant Administrator, 402-471-6280

**National and State Foundations:** Consider the national and state foundation funding opportunities available to communities like the Kiewit Foundation, Daugherty Foundation, and others in Nebraska that fund recreation.

### Other Funding Sources to Consider

- Private business entities as donors
- Ballot measures
- Bonds

*Hiking and navigating nature at Ponca State Park. (Dixon County)*

## Conclusion

Public outdoor recreation spaces provide essential community benefits when they incorporate the desires and preferences of community members. Ensuring planning processes for outdoor recreation projects are a collaborative effort, with buy-in and engagement from the community throughout the process, is critically important when making recreation projects and spaces successful.

The supply, demand, public participation, success stories, goals, and recreation priorities outlined in this SCORP provide a clear direction for outdoor recreation efforts in Nebraska over the next five years. It is the intent of this document to be used as guidance for providers of recreation and to ensure all Nebraskans can revel in the beauty of our natural landscape. Please use the information within this document to help navigate through your outdoor recreation success stories and remember that Time Outdoors is Time Well Spent.

*Hiking at Ponderosa Wildlife Management Area. (Dawes County)*

# Acknowledgments

*Horseback riding at the 4-H Camp Trail Ride near Halsey. (Thomas County)*

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George Cunningham – Director, Nebraska Wildlife Federation; Lincoln, Nebraska

*Pine Ridge turkey hunt at Chadron Creek Ranch Wildlife Management Area. (Dawes County)*

*Spotting wildlife at Fort Robinson State Park. (Dawes County)*

The preparation and printing of this plan was financed in part through a planning grant from the National Park Service, Department of the Interior, under the provisions of the Land Water Conservation Fund Act of 1965 (Public Law 88-578; as amended).

**OutdoorNebraska.org**

2200 N. 33rd Street | Lincoln, NE 68503-0370

402-471-0641



2018-82086-MS-11/20

*Learning about wildlife at Ponca State Park. (Dixon County)*

# Statewide Comprehensive Outdoor Recreation Plan

NEBRASKA
GAME PARKS

# Appendix II

# HDR, Inc.'s "Plan Preserve Play: STAR WARS Special Committee Final Report"

## Executive Board of the Legislative Council for the State of Nebraska

# Statewide Tourism and Recreational Water Access and Resource Sustainability (STAR WARS) Special Committee Final Report

May 4, 2022

DRAFT



Plan. Preserve. Play.

# Contents

## Appendices

# 1.0 Introduction

## 1.1 Purpose and Drivers

With the passing of Legislative Bill 406 (LB406), the Executive Board of the Legislative Council for the State of Nebraska created the Statewide Tourism and Recreational Water Access and Resource Sustainability (STAR WARS) Special Committee. This committee was tasked with identifying opportunities to enhance and sustain Nebraska's two greatest assets—its people and its resources—through creating a vision for three specific resource areas within the state: the Lake McConaughy Region in Keith County, the Lower Niobrara / Northern Knox County Region, and the Lower Platte River Corridor Region. These three resource areas each offer the possibility to serve as a catalyst, creating regional and state benefits for the citizens of Nebraska for years to come. The purpose of this study was to create a foundation for a shared vision for each area and to provide an understanding of the real, tangible benefits offered by that vision. Figure 1 highlights the resource areas for study identified in LB406.

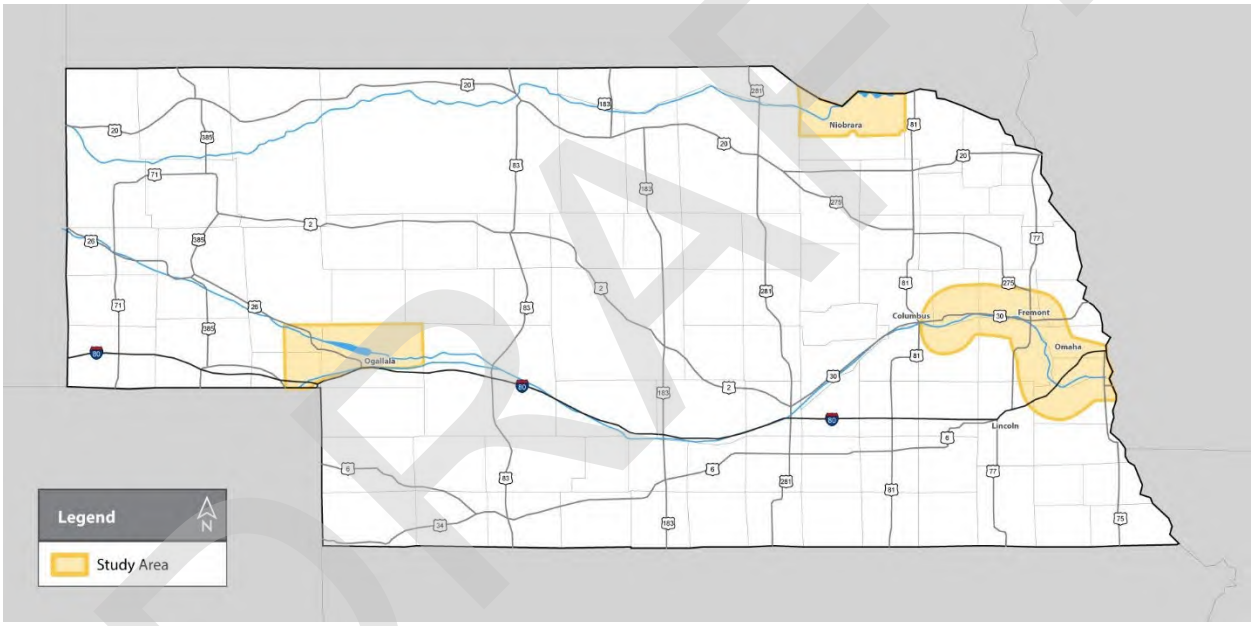



**Figure 1. Resource Areas for Study Identified in LB406**

The future vibrancy of the people, communities, and businesses of Nebraska depends on the following:

- Reliable sources of water
- Well-planned flood control
- Access to sustainable water resources and outdoor recreational opportunities
- Quality of life to attract and maintain our population base
- Enhanced tourism in Nebraska from surrounding areas to boost local economies

Initiatives identified during this study are intended to increase jobs, promote economic development, grow tax receipts, and provide enhanced quality of life benefits for all Nebraskans.

## 1.2 Resource Areas

Three specific resource areas within the state identified in LB 406 are included in this study, as described in the following sections.

### 1.2.1 Lake McConaughy Region in Keith County

Lake McConaughy is Nebraska's largest reservoir and consistently is one of the state's largest recreation and tourist attractions. Kingsley Dam, located on the east side of the reservoir, is among the largest of its type in the world. Located 8 miles north of Ogallala, Lake McConaughy State Recreation Area is known for white sand beaches and clear waters that are a favorite with campers, boaters, wind surfers, swimmers, water skiers, scuba divers, picnickers, hunters, anglers, and others seeking outdoor fun. This planning effort focused on potential recreational and other development improvements to build on what the region currently offers. Figure 2 shows the study area for the Lake McConaughy Region in Keith County.


**Figure 2. Study Area for the Lake McConaughy Region in Keith County**

### 1.2.2 Lower Niobrara / Northern Knox County Region

Situated at the confluence of the Niobrara and Missouri Rivers on Nebraska's northeastern border, Niobrara State Park offers cabins, camping, picnicking, swimming, boat ramps, horseback trails, hiking, fishing, and wildlife watching opportunities. To the east of Niobrara State Park, the Lewis and Clark Lake State Recreation Area, which is located along the south shore of Lewis and Clark Reservoir, offers modern cabins, boating, fishing, and hunting opportunities. This planning effort focused on potential recreational and other development improvement opportunities to build on and complement what these two facilities and the region currently offers. Figure 3 shows the study area for the Lower Niobrara / Northern Knox County Region.


**Figure 3. Study Area for the Lower Niobrara / Northern Knox County Region**

### 1.2.3 Lower Platte River Corridor Region

The study of the Lower Platte River Corridor Region focused on measures to provide flood mitigation to public and private property within this river reach, defined as the reach of the Platte River from Columbus to its confluence with the Missouri River. The study also sought to identify opportunities to maximize recreational opportunities and tourism, provide resilience of available water supply, improve water quality, and provide increased opportunities for habitat preservation—either in conjunction with identified flood mitigation measures or as stand-alone initiatives. Figure 4 shows the study area for the Lower Platte River Corridor Region.


**Figure 4. Study Area for the Lower Platte River Corridor Region**

## 1.3 Acknowledgments

The STAR WARS Special Committee is comprised of the following Nebraska State Senators:

- Sen. Mike Hilgers, Speaker, District 21
- Sen. Rob Clements, District 2
- Sen. Mike McDonnell, District 5
- Sen. Mike Flood, District 19
- Sen. John McCollister, District 20
- Sen. Bruce Bostelman, District 23
- Sen. Anna Wishart, District 27
- Sen. Tom Brandt, District 32
- Sen. Tim Gragert, District 40
- Sen. Dan Hughes, District 44

# 2.0 General Methodology

For each resource area, a similar approach was used to work collaboratively with the STAR WARS Special Committee and stakeholders in the region to develop initiatives to meet project purposes. In addition to extensive coordination with members of the STAR WARS Special

Committee, the approach included stakeholder and public engagement; data collection, base mapping, and analysis; market assessments; initiative development; economic analyses; and regulatory permitting and environmental compliance review. The methodology for each is described below.

## 2.1 Stakeholder and Public Engagement

At the onset of the study effort, a comprehensive public engagement plan was developed to address the following four primary engagement goals:

- Manage stakeholder and public expectations by communicating study efforts, schedule, and opportunities to provide input.
- Receive important background information and input on the resource areas—critical to initiative development—from local participants.
- Collaborate with local partners to broadly communicate study efforts and drive public participation.
- Build positive public sentiment through easy-to-access, consistent, and clear communications.

A variety of approaches were used to execute these engagement goals, including in-person workshops, public hearings, and electronic visioning surveys. A project website was developed to provide 24/7 access to information and public engagement opportunities throughout the three study areas, including maps, slides, surveys, and an online comment form. The website can be found at www.planpreserveplayNE.com. The stakeholder and public engagement efforts for each of the three resource areas are detailed in Appendices I, II, and III, respectively.

## 2.2 Data Collection, Base Mapping, and Analysis

Working with the key stakeholders, available data was assembled, reviewed, and analyzed to create the study area base and analysis maps for each study area. This effort included compilation of available geographic information system (GIS) data, aerial photos, previous applicable planning studies, development proposals, environmental studies, infrastructure studies, and topographic surveys. The data collection and analysis efforts were enhanced by context assessment workshops hosted for each resource area. These workshops provided a focused opportunity to understand existing and planned features, as well as each area's strengths, weaknesses, opportunities, and threats (SWOT) that established the context for developing initiatives.

Specific to the flood mitigation efforts for the Lower Platte River Corridor Region, additional analyses were completed to study the lower Platte River and its tributaries to support development of potential flood mitigation initiatives. These additional analyses included the following:

- **Hydrologic Analysis.** A hydrologic model of the lower Platte River basin was developed and calibrated for use in estimating the magnitude and timing of flood flows throughout the basin. Once calibrated, the hydrologic model was used to assess potential flood mitigation measures, such as potential flood storage reservoirs to reduce flooding in the lower Platte River. The development and calibration of the hydrologic model is described in Appendix III.A.

- **Hydraulic Analysis.** A two-dimensional, unsteady flow hydraulic model of the lower Platte River reach was developed and calibrated for use in establishing estimates of flood flow hydrographs and corresponding water surface elevations throughout the reach. Once calibrated, the hydraulic model was used to assess potential flood mitigation measures, such as off-channel storage, conveyance improvements, and levees. The development and calibration of the hydraulic model is described in Appendix III.B.

Specific to the recreation and economic development study efforts for the Lower Platte River Corridor Region, additional analyses were completed to evaluate a potential off-channel lake adjacent to the Platte River. The potential lake would be constructed through dredging activities. These additional analyses included the following:

- **Groundwater Analysis.** A numerical groundwater model of the lower Platte River valley was developed and calibrated to simulate groundwater and surface water interactions of the Platte River, as well as to provide estimates of static water levels anticipated for potential dredged lake projects in the area. The development and calibration of the hydraulic model is described in Appendix III.C.
- **Geotechnical Analysis.** Geotechnical evaluations for potential dredge lake projects in the area were conducted to estimate stable geometric and slope configurations, as well as to provide minimum offsets from existing levees, infrastructure, and the Platte River channel. The geotechnical data collection and analysis is described in Appendix III.D.

## 2.3 Market Assessments

Market assessments of each area were completed to support the planning process. Case study research and a high-level market assessment were conducted to help ascertain the market potential of each project location. To inform the opportunity assessment, existing conditions in each study area were evaluated, including assessing employment trends and researching existing attractions, lodging, support services, and housing. Local economic and market conditions were analyzed, as were comparable and aspirational case studies. Study area conditions were then compared to case study locations using a “presence and absence” approach. Items that were missing or underrepresented in the study area relative to comparable areas became areas of focus for the plan and future investment.

Potential market demand for each location was evaluated. This included an examination of uses such as residential, hospitality, service/retail, recreation/tourism, and wild card uses such as resort and/or other visitor attractions. This data provided an understanding of the development potential, market conditions, and future trends that will influence future markets relative to each location. This understanding also assisted in establishing the development program to be examined for each location. The findings were summarized by outlining the key pillars of a vibrant tourism ecosystem: lodging, attractions, and housing. The detailed market assessment for each study area is included in Appendices I, II, and III.

## 2.4 Initiatives Development

Using the foundational knowledge garnered through the data collection, context assessment workshops, visioning surveys, and market assessment efforts, potential initiatives for each study

area were developed in collaboration with the STAR WARS Special Committee and stakeholders. The initiatives developed for each study are described in Section 3.0.

For the Lake McConaughy and Niobrara / North Knox County study areas, which had the benefit of existing amenities and resources, initiatives were developed through week-long design workshops. These workshops were held on-site where participants had the opportunity to review draft concepts and provide feedback and guidance daily, which was then iteratively incorporated into revised concepts. The result of the design workshops at each site was a conceptual master plan that consisted of recommendations relating to design character, recreational opportunities, land use, mobility options, building typologies and placement, future streets and street sections, open space, public facilities, etc. This design workshop process and conceptual master plans for these two study areas are documented in Appendices I and II.

Initiatives for flood mitigation in the Lower Platte River Corridor Region, as well as recreation and economic development within the study area, were identified through collaboration with key stakeholders in the study area with interests in those fields. Specific to flood mitigation, numerous study efforts conducted over the past 50 years by entities such as Natural Resources Districts (NRD), the US Army Corps of Engineers (USACE), and cities and counties within the study area were reviewed and considered for potential initiatives.

## 2.5 Economic Analysis

Using concept-level cost estimates, an economic impact analysis was completed. Economic impacts capture the myriad of transactions between buyers and sellers that are linked to some types of spending on a good or service. For the STAR WARS initiatives, these expenditures cover the construction of infrastructure as well as the expenses associated with visitors, recreators, and users of the infrastructure. The main objective of an economic impact analysis is to determine the effect of a change in the demand for goods and services on the level of economic activity in a given area.

This economic analysis was completed using concepts and analytic approaches based on standard economic impact methodologies and multipliers from IMPLAN®, as well as literature research. The analysis of total economic impacts builds from data on expenditures and the estimated combined impact of direct, indirect, and induced economic effects. Each of these effects captures a series of related types of spending. The effects used in this analysis are defined as follows:

- **Direct effect:** Refers to the economic activity resulting from direct spending by businesses or agencies located in the study area (e.g., contractor expenditures related to construction equipment and/or materials)
- **Indirect effect:** Refers to the economic activity resulting from purchases by local firms who are the suppliers to the directly affected (first round) and other indirectly affected (secondary round) businesses or agencies (e.g., supplier expenditures resulting from direct-effect sales)
- **Induced effect:** Refers to the increase in economic activity, over and above the direct and indirect effects, associated with increased labor income that accrues to workers in the direct and indirect rounds (e.g., the contractor and all suppliers) and is spent on household goods and services purchased from businesses within the study area (e.g., increase in income from direct or indirect effects)

The economic impact analysis also includes annual operational impacts related to visitor spending on trips for the recreation amenities created by the projects. The economic analysis is included in Appendix IV.

## 2.6 Regulatory Permitting and Environmental Compliance Review

A regulatory permitting and environmental compliance review was conducted to identify federal, state, and local permitting and environmental compliance constraints, as well as potential requirements associated with proposed initiatives. This review included requirements such as the following:

- Clean Water Act Section 404 permitting
- National Environmental Policy Act (NEPA)
- USACE Section 408 authorization
- National Historic Preservation Act Section 106 for cultural resources
- Migratory Bird Treaty Act
- Federal Aviation Administration
- National Pollutant Discharge Elimination System
- Local floodplain development permitting

The regulatory permitting and environmental compliance review is included in Appendix V.

# 3.0 Initiatives

Initiatives identified through the processes described in Section 2.4 are summarized in the following sections.

## 3.1 Lake McConaughy Region in Keith County

The Lake McConaughy Region conceptual master plan included potential recreational and other development and improvement opportunities to enhance one of the state's top tourist attractions. The ultimate goal of these initiatives is to increase population, tourism, job growth, and per capita income, and to enhance the region's economy.

Identified initiatives include the following:

- Improved north/south corridor and gateway experience
- North shore marina and park at Lake McConaughy State Recreation Area
- Observation towers and overlooks at Lake McConaughy State Recreation Area
- Event center at Lake McConaughy State Recreation Area
- Resort and master-planned community with aerial tram at Lake McConaughy State Recreation Area
- Eco-tourism lodge and resort at Lake McConaughy State Recreation Area
- Additional camping and day-use activities at Lake McConaughy State Recreation Area
- Additional camping, day-use activities, and improvements at Lake Ogallala State Recreation Area
- Infill housing in Ogallala

Appendix I contains details and renderings of the full suite of initiatives identified for the Lake McConaughy Region.

## 3.2 Lower Niobrara / Northern Knox County Region

The study of the Lower Niobrara / Northern Knox County Region identified initiatives to enhance the opportunities at Niobrara State Park, Lewis and Clark Lake State Recreation Area, and northern Knox County that can drive local, regional, and statewide economic growth.

Identified initiatives include the following:

- Large marina at Weigand area of Lewis and Clark Lake State Recreation Area
- Additional camping and day-use activities at the Weigand/Burbach area of Lewis and Clark Lake State Recreation Area
- Additional cabins at the Weigand/Burbach area of Lewis and Clark Lake State Recreation Area
- Boat ramps at the Weigand, Burbach, Bloomfield, and Miller Creek areas of Lewis and Clark Lake State Recreation Area
- Revitalized Niobrara town center / infill rehab plan
- “Niobrara Landing,” a first-class boat launch near Niobrara
- Pedestrian bridge connecting Niobrara with Niobrara State Park
- Event center and lodge in Niobrara State Park
- Modernized entrance and upgraded amenities at Niobrara State Park

Appendix II contains details and renderings of the full suite of initiatives identified for the Lower Niobrara / Northern Knox County Region.

## 3.3 Lower Platte River Corridor Region

The study of the Lower Platte River Corridor Region focused on measures to provide flood mitigation to public and private property within this river reach, defined as the reach of the Platte River from Columbus to its confluence with the Missouri River. The study also sought to identify opportunities to maximize recreational opportunities and tourism, provide resilience for available water supply, improve water quality, and provide increased opportunities for habitat preservation—either in conjunction with identified flood mitigation measures or as stand-alone initiatives.

Identified flood mitigation initiatives include the following:

- Flood storage reservoirs on tributaries to the lower Platte River that could provide flood reduction in the lower Platte River – Sites in the Loup River, Elkhorn River, Wahoo Creek, and Salt Creek were included. Approximately 300 locations for flood storage reservoirs to reduce potential flooding on the Platte River between Columbus and the confluence of the Missouri River were identified. In addition to flood mitigation, flood storage reservoirs could also provide permanent storage for recreational, habitat, and water supply needs. After analyzing and screening these 300 locations, 21 potential locations were evaluated in more detail. Flood storage initiatives are described in Appendix III.A.

    - The Lower Platte North Natural Resources District (LPNNRD) provided testimony at the public information hearing regarding current planning and design efforts for a series of flood storage reservoirs in the Upper Wahoo Creek Watershed.
- Several levee concepts along the lower Platte River to protect public and private property from flood flows – These included levee alignments around the Schuyler and Fremont areas identified in past USACE studies, a comprehensive levee system that extends along the entire lower Platter River reach, a levee system that protects incorporated and unincorporated communities throughout the corridor, and a levee system that protects incorporated communities with the Corridor. Descriptions of the levee initiatives are included in Appendix III.B.
    - The Colfax County Board of Commissioners provided design and cost information for the repair of jetty west of Schuyler along the Platte River west of Schuyler damaged during the historic 2019 flood. Without the jetty in place, Platte River flows enter the Lost Creek channel and impact the southern portion of Schuyler at discharges well below flood stage.
- Mitigation concepts for ice jam effects on lower Platte River flood flows for locations identified by the Papio-Missouri River NRD as areas of historic ice jam occurrence – These concepts were based on increased conveyance, either within the channel or increasing overbank conveyance in the floodplain through construction of bypass channels. Descriptions of the ice jam mitigation concepts are included in Appendix III.B.

Identified initiatives focused on recreation and economic development include the following:

- Construction of a lake or lakes in the lower Platte River corridor – Potential lake locations east and west of the Platte River were identified. Potential sites on the east side of the Platte River were prioritized based on access and existing infrastructure considerations.
- Public access and recreation amenities associated with the lake, including incorporation into the Venture Park system of the Nebraska Game and Parks Commission (NGPC) and enhancing the trail networks and park connectivity.

# 4.0 Preferred Initiatives

Following identification of potential initiatives, several concepts were selected by the STAR WARS Special Committee as “Preferred Initiatives” for each location, as described below.

## 4.1 Lake McConaughy Region in Keith County

### 4.1.1 Preferred Initiatives Descriptions

The following three initiatives in the Lake McConaughy Region in Keith County were prioritized by the STAR WARS Special Committee:

1. **A permanent marina at Lake McConaughy, able to withstand water level fluctuations and serve as an amenity to tourists, residents, and small businesses.** The water level at Lake McConaughy can fluctuate up to 65 feet during the season, making access to the lake extremely difficult during times of low water. A new full-service marina is envisioned that can accommodate these significant water level fluctuations. This new marina, with 100+ slips, would serve as a resilient amenity for residents, tourists, and local businesses. In conjunction with several additional proposed tourist

amenities, the investment would boost day-use and overnight tourism and help extend the season at Lake McConaughy State Recreation Area.

**Figure 5. Lake McConaughy Marina Plan**

**Figure 6. Lake McConaughy Marina Perspective**

2. **Roadway improvements at key areas surrounding Lake McConaughy to reduce vehicle wait times, increase mobility, and enhance safety at peak times during the tourism season.** A series of improvements are proposed for the roadway network that provides access to Lake McConaughy, including resurfaced Lakeview Road on the south side of Lake McConaughy, shoulders on Highway 92 on the north side of Lake McConaughy, and turn lanes along Highway 92 at Arthur Bay, Lemoyne, and Belmar. These improvements would improve mobility and access to the lake, reduce waiting times, and enhance safety at peak times during the Lake McConaughy tourism season.


**Figure 7. Lake McConaughy Road Improvement Locations**

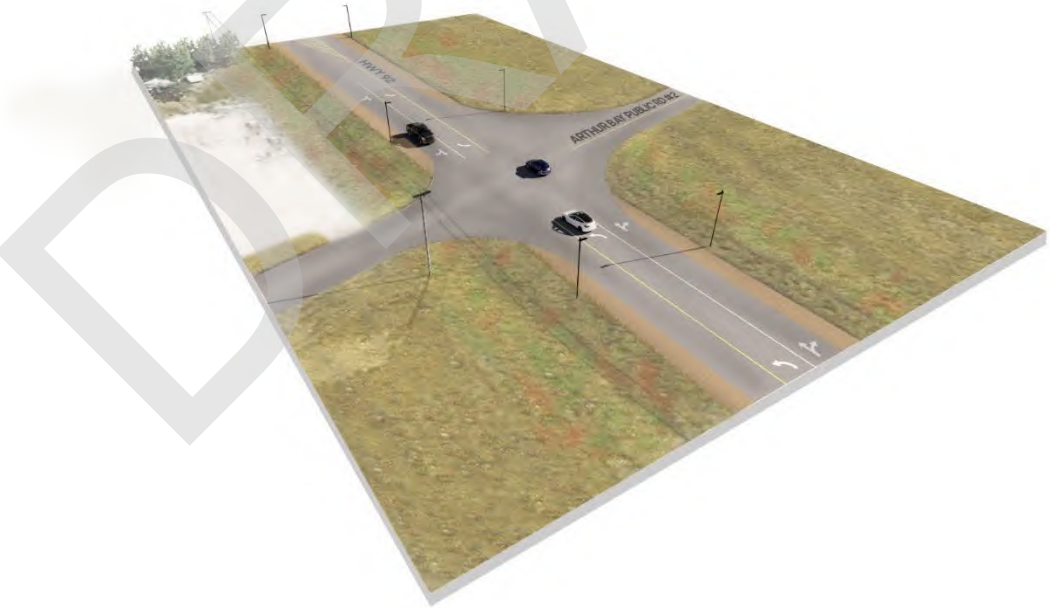


**Figure 8. Lake McConaughy Road Improvement – Typical Intersection Improvements**

3. **An iconic, cost-effective entrance feature to cement Lake McConaughy State Recreation Area's status as a key tourism driver in Nebraska.** An iconic gateway entrance to Lake McConaughy would incorporate the native landscape and celebrate the lake's stature as one of the premier tourist destinations in the state. This dynamic landform structure, built at a monumental scale, would feature messaging for vehicles traveling in either direction.

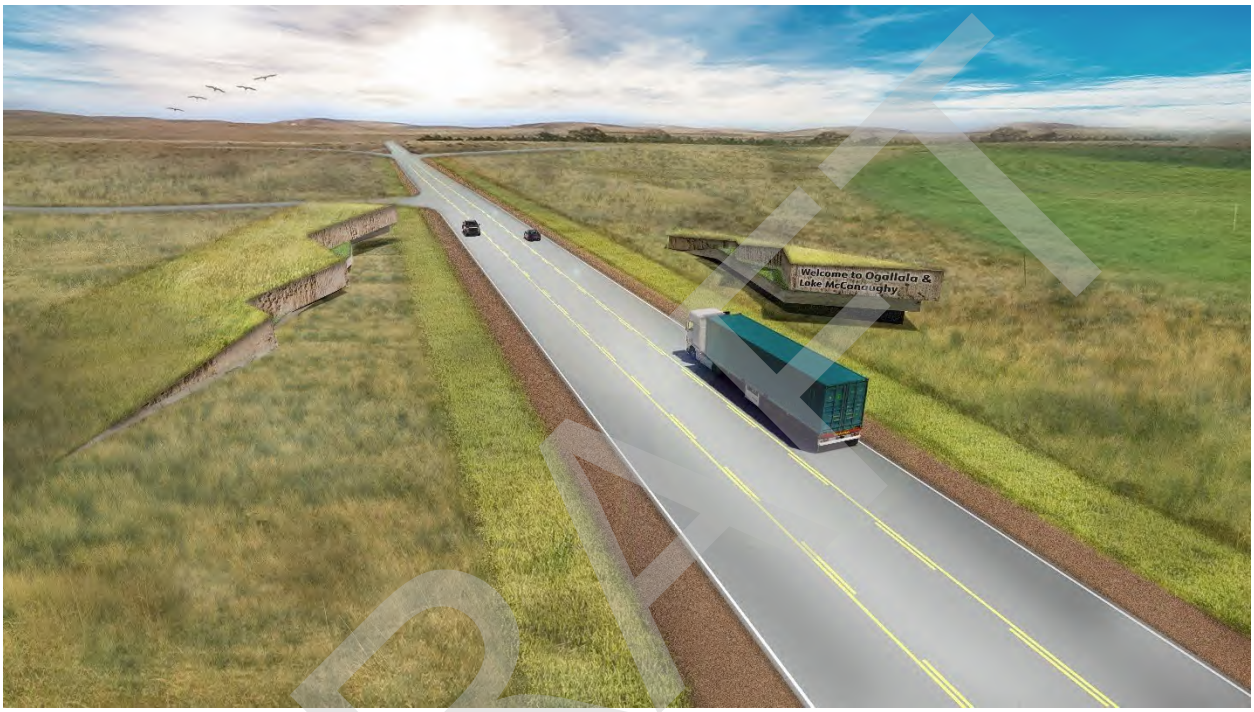



**Figure 9. Lake McConaughy Entrance Perspective**

### 4.1.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 1.

**Table 1. Preliminary Cost Estimates for Preferred Initiatives in the Lake McConaughy Region**

| Preferred Initiative | Preliminary Cost Estimate ($) |
|---|---|
| New Marina at Lake McConaughy[1] | $34.3M |
| Roadway Improvements[2] | $6.8M |
| Iconic Gateway Entrance[3] | $1.1M |
| **Total** | **$42.2M** |

[1] Includes marina, parking/paving, and park amenities.
[2] Includes shoulders, turn lanes, and resurfacing.
[3] Includes monument and signage, lighting, and native landscape.

### 4.1.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 2.

**Table 2. Economic Impacts for Preferred Initiatives in the Lake McConaughy Region**

| Preferred Initiative | Output (Sales) | Jobs | Income |
|---|---|---|---|
| **Construction Impact** | | | |
| New Marina at Lake McConaughy | $57.8M–$68.0M | 61–71 | $20.5M–$24.1M |
| Marina/Park Amenities | $15.3M–$17.8M | 16–19 | $5.4M–$6.3M |
| Roadway Improvements | $11.6M–$12.7M | 12–13 | $4.1M–$4.5M |
| Iconic Gateway Entrance | N/A | N/A | N/A |
| **Annual Operational Impact** | | | |
| New Marina at Lake McConaughy[1] | $1.6M | 12 | $0.9M |
| Marina/Park Amenities[2] | $0.5M | 6 | $0.3M |
| Roadway Improvements | N/A | N/A | N/A |
| Iconic Gateway Entrance | N/A | N/A | N/A |
| **Total Economic Impact** | | | |

[1] Includes spending for boat fuel/oil, boat repair maintenance, new boat sales, boat rentals, other boat expenses, slip rentals, boat storage.
[2] Includes spending for sporting goods and merchandise, food, lodging, and other miscellaneous expenses.

### 4.1.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- Keith County Area Development (KCAD)
- NGPC
- Private investors/partners
- Infrastructure Investment and Jobs Act (IIJA) funding

## 4.2 Lower Niobrara / Northern Knox County Region

### 4.2.1 Preferred Initiatives Descriptions

The following three initiatives for the Lower Niobrara / Northern Knox County Region were prioritized by the STAR WARS Special Committee:

1. **A greatly expanded marina at Lewis and Clark Lake State Recreation Area, drawing new revenue streams and a larger share of tourism dollars at Nebraska's second-largest lake.** The Weigand Marina currently has 100 slips, with a waiting list of more than 400. To accommodate this demand and create additional economic impact, the marina would be expanded to at least 600 slips. This would greatly enhance water access for area residents and tourists, and would create an enhanced revenue stream for NGPC. In addition to the marina expansion, the retrofit could include several new amenities and new administrative office space, all of which would allow Nebraska to compete with South Dakota for tourism dollars and tax revenue.

**Figure 10. Weigand Marina Plan**

**Figure 11. Weigand Marina Perspective**

2. **An event center and lodge in Niobrara State Park to attract tourists, add jobs, and provide one-of-a-kind vistas to visitors from across the country.** The Eagle View Group Lodge at Niobrara State Park overlooks the Missouri River and has one of the premier views in Nebraska. However, the size of the lodge does not accommodate large groups, and the design does not fully take advantage of its special location. To better serve the community and to create a destination that draws visitors year-round and becomes an economic engine for the community, it is proposed that the existing lodge be replaced with a new event center and lodge facility that is designed to fit into its hillside context and provide expansive views of the valley. The event center would accommodate 300-person events, such as weddings, family reunions, birthday parties, business meetings, and small conferences. It would include a restaurant, catering kitchen, and/or food-truck hook-ups for destination food service. The lodge would contain 40 rooms, with the potential for expansion. Additionally, the facility could include a spa, a nature/site history center, a wrap-around viewing deck, and accessible trails leading down to the river. As conceptualized, the event center would be built with State funding, while the lodge would be built and managed by a third-party concessionaire.


**Figure 12. Niobrara State Park Event Center and Lodge Plan**

**Figure 13. Niobrara State Park Event Center and Lodge Perspective**

**Figure 14. Niobrara State Park Event Center and Lodge Perspective**

3. **A first-class boat launch to provide residents, hunters, and anglers access to the Niobrara River.** A new boat launch is envisioned near the Village of Niobrara to provide much-needed access to the Missouri and Niobrara Rivers. Due to sedimentation and the flood of 2019, the previous boat launch is unusable. Recommended to be located in close proximity to the Village of Niobrara, the preferred location would be determined through a feasibility study. Construction of the first-class boat launch would be an economic catalyst for the Village of Niobrara and would enhance the quality of life for residents and tourists who come to northeast Nebraska for world-class hunting and fishing.

**Figure 15. Niobrara Landing Perspective**

### 4.2.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 3.

**Table 3. Preliminary Cost Estimates for Preferred Initiatives in the Lower Niobrara / Northern Knox County Region**

| Preferred Initiative | Preliminary Cost Estimate |
|---|---|
| Weigand Marina Expansion/Retrofit[1] | $41.5M |
| Niobrara Landing Boat Launch[2] | $2.8M |
| Event Center and Lodge at Niobrara State Park[3] | $42.4M |
| **Total** | **$86.7M** |

[1] Includes marina, utilities, parking, and land-side amenities.
[2] Includes marina, paving/parking, and land-side amenities.
[3] Includes lodge, event center, parking/paving, and cultural entrance.

### 4.2.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 4.

**Table 4. Economic Impacts for Preferred Initiatives in the Lower Niobrara / Northern Knox County Region**

| Preferred Initiative | Output (Sales) | Jobs | Income |
|---|---|---|---|
| **Construction Impact** | | | |
| Weigand Marina Expansion/Retrofit | $67.8M–$75.9M | 69–77 | $24.1M–$27M |
| Niobrara Landing Boat Launch | $5.1M–$7.6M | 5–8 | $1.8M–$2.7M |
| Niobrara Event Center and Lodge | $69.4M–$81.6M | 71–83 | $24.7M–$29M |
| Event Center at Niobrara State Park | $46.5M–$49M | 47–50 | $16.5M–$17.4M |
| Lodge at Niobrara State Park | $24.5M–$29.4M | 25–30 | $8.7M–$10.4M |
| **Annual Operational Impact** | | | |
| Weigand Marina Expansion/Retrofit[1] | $14.5M | 120 | $0.7M |
| Niobrara Landing Boat Launch[2] | >$0.1M | 3 | >$0.1M |
| Event Center at Niobrara State Park[3] | $0.9M | 1 | $1.0M |
| Lodge at Niobrara State Park[4] | $4.0M | 3 | >$1.5M |
| **Total Economic Impact** | | | |

[1] Includes spending for boat fuel/oil, boat repair maintenance, new boat sales, boat rentals, other boat expenses, slip rentals, boat storage, sporting goods and merchandise, food, lodging, and other miscellaneous expenses.
[2] Includes spending for boat fuel/oil, other boat expenses, sporting goods and merchandise, food, lodging, and other miscellaneous expenses.
[3] Includes estimated revenue from facility rental and occupancy.
[4] Includes estimated revenue from facility rental and occupancy.

### 4.2.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- NGPC / Motorboat Access Grants
- Community Development Block Grant (CDBG) Grants
- Lewis and Clark NRD
- Lower Niobrara NRD
- Ducks Unlimited
- Ponca Tribe of Nebraska
- Private donors
- IIJA funding

## 4.3 Lower Platte River Corridor Region

### 4.3.1 Preferred Initiatives Descriptions

The following three initiatives for the Lower Platte River Corridor Region were prioritized by the STAR WARS Special Committee:

1. **Flood mitigation efforts within the Upper Wahoo Creek watershed in Saunders County to address the potential for future catastrophic flood events in that region.** LPNNRD is currently completing planning, design, and permitting of flood mitigation measures in the Upper Wahoo Creek watershed through the Natural Resources

Conservation Service's (NRCS) Watershed Flood Prevention and Operations (WFPO) program. Flood storage reservoirs were evaluated within the Wahoo Creek watershed as part of this study and are discussed in Appendix III.A. The specific flood mitigation measures included in LPNNRD's current effort were not evaluated as part of this study; therefore, the reader is referred to the LPNNRD website (www.lpnnrd.org) for further details regarding the Upper Wahoo Creek Watershed Plan content.

2. **Construction of repairs to Platte River jetty system west of Schuyler in Colfax County.** During the historic flooding in 2019, a jetty system along the left (north) bank of the Platte River was severely damaged. Subsequently, multiple occurrences of flows entering Lost Creek adjacent to this reach of the river have occurred, resulting in flooding to the southern extents of Schuyler. The City of Schuyler and Colfax County have hired an engineering consultant to evaluate and design the necessary repairs to the jetty system. The Colfax County Board of Commissioners provided design and cost information for the repair of jetty.

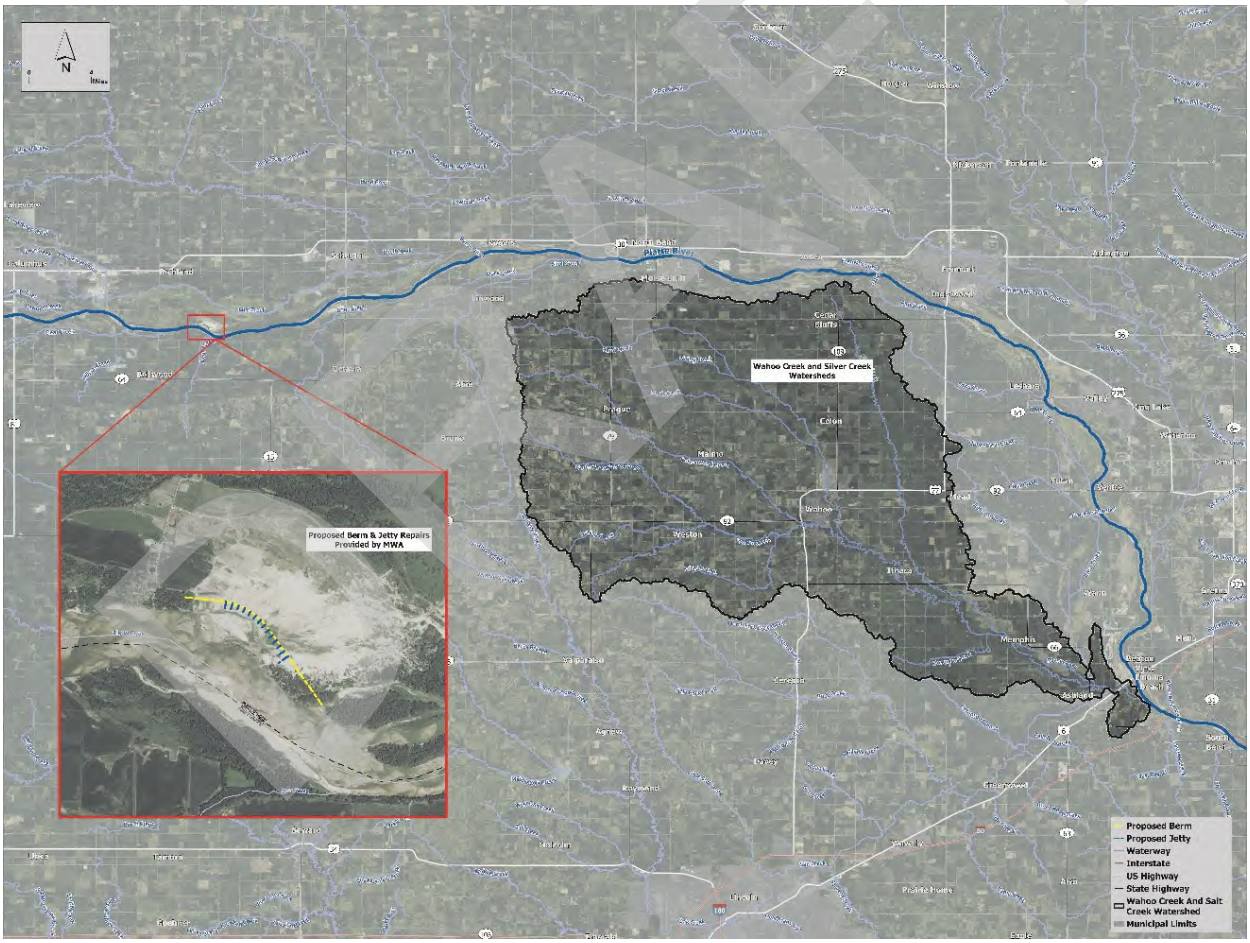



**Figure 16. Upper Wahoo Creek Watershed and Platte River Jetties near Schuyler**

3. **A 3,500 to 4,000 acre lake constructed adjacent to the Platte River (without damming the Platte River) to provide recreational and economic development opportunities.** This proposed lake would provide public access and ample outdoor recreational activities—including fishing, boating, swimming, sailing, hiking, birding, camping, and glamping—and would improve the quality of life of Nebraskans. The size of the lake, similar to Lake Okoboji in Iowa, would retain tourism dollars currently leaving the state, boosting the economy and providing an increase in state tax revenues. Other opportunities include flood control, drought resiliency, new residential living options, a community town center, a regional recreation complex, and a destination resort. Unlike the other Preferred Initiatives detailed in this report that are well-defined (location, project elements, etc.), the complexity and size of the proposed lake project requires additional evaluation to determine the project location, size, and components, and ultimately the technical and financial feasibility. Therefore, the intent of this Preferred Initiative was to conduct the evaluations necessary to conceptually define the project elements and determine technical and financial feasibility of the project.

   Preliminary analyses of the proposed lake were conducted in this effort to assess initial feasibility and potential impacts and benefits as part of this study. A summary of these analyses is as follows:

   - Impacts on water surface elevations of the Platte River and flood mitigation benefits of the potential lake were evaluated and included in Appendix III.B. Results of the analysis indicate the following:
     - The proposed lake may have localized impacts in water surface elevations of the Platte River within or immediately adjacent to the project. Any rise in water surface elevations adjacent to the project site would need to be mitigated.
     - The proposed lake may provide up to 30,000 acre-feet of flood water storage; however, the flood mitigation benefits downstream of the lake on the Platte River are minor due to the timing of this storage filling relative to the peak flow occurring downstream and the total volume conveyed in the Platte River during flood events. Optimizing the operational aspects of the lake's outlet works may increase the flood mitigation benefits of the project.
   - An initial assessment of potential impacts on adjacent public water supply wellfields were evaluated using the groundwater model described in Section 2.2 and documented in Appendix III.C. Results of the analysis indicate the following:
     - The lake would not have a negative impact on the water supplies to the adjacent public water supply wellfields of the City of Lincoln and the Metropolitan Utilities District.
     - The lake may provide some benefit to the City of Lincoln wellfield during droughts where Platte River flows are severely diminished.
   - The potential depletive effects on flows in the lower Platte River of evaporation from a large open water body was evaluated and included in Appendix V, Attachment A. The results of the analysis indicate that evapotranspiration rates from the lake would be equal to or less than evapotranspiration rates of the area under current land uses and therefore would not increase depletions to the lower Platte River.

- General concepts for the proposed lake and the ultimate amenities and development surrounding the lake were developed to estimate potential economic benefits. The economic analysis is summarized in Section 4.3.3 and detailed in Appendix IV.

**Figure 17. Potential Lake**

**Figure 18. Potential Lake**

### 4.3.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 5. The complexity and size of the proposed lake project requires additional evaluation to determine the project location, size, and components that would allow development of a preliminary cost estimate.

**Table 5. Preliminary Cost Estimates for Preferred Initiatives in Lower Platte River Corridor Region**

| Preferred Initiative | Preliminary Cost Estimate |
|---|---|
| Flood Mitigation | $25M |
| Lake and Recreation Area[1] | $46.1M |
| **Total** | **$71.1M** |

[1] Includes planning/permitting and capital account.

### 4.3.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 6.

**Table 6. Economic Impacts for Preferred Initiatives in Lower Platte River Corridor Region**

| Preferred Initiative | Output (Sales) | Jobs | Income |
|---|---|---|---|
| **Construction Impact** | | | |
| Flood Mitigation | | | |
| Lake and Recreation Area | $5.5B | 6,000 | $1.8B |
| **Annual Operational Impact** | | | |
| Lake and Recreation Area[1] | $140M | 1,100 | $22.7M |
| Impact of Development[2] | $300.5M | 2,674 | $97.5M |
| **Total Economic Impact** | | | |

[1] Includes recreation spending by lake visitors on gas, food, lodging, merchandise, and other spending categories.
[2] Includes economic impacts from household spending by new out-of-state single-family owners near lake.

### 4.3.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- USACE
- LPNNRD
- Colfax County
- Schuyler
- Private partners
- NRCS
- Water Sustainability Fund

# 5.0 Implementation

Implementation of each of the Preferred Initiatives would require numerous and varied actions of varying complexity, including potential feasibility studies, regulatory and environmental compliance, and design and construction.

For some elements, feasibility studies are needed to identify technical considerations of initiative implementation, to determine phasing, or to confirm economic viability. Feasibility studies can take up to 12 months for development and review.

Regulatory permitting and environmental compliance must be addressed prior to or, at a minimum, concurrently with design. Permits are required prior to commencement of construction. Time frames for regulatory permits and environmental compliance can vary depending on the nature of the requirements and the complexity of the initiative. A detailed discussion of the regulatory permitting and environmental compliance requirements of the Preferred Initiatives is provided in Appendix V.

There are various ways for design and construction to occur. Traditional design-bid-build is a step-wise process that allows for separate design, contractor bidding, and then construction phases. This is the most time-consuming process, but it typically has the lowest risk to the owner. Design-build is a method of the design and construction process in which a preliminary design is completed, but then the final design and construction is completed by a design-build contractor who is responsible for developing design and implementing construction as part of

one collaborative effort. This method can save time but introduces other potential risks as part of the process.

Table 7 identifies the various implementation measures and estimated timelines for each Preferred Initiative. Timelines will vary based on lead agency / owner prioritization of staff and financial resources, as well as the complexity of regulatory permitting, design, and construction efforts associated with the Preferred Initiative.

The Preferred Initiative of a proposed Lower Platte River Corridor Region lake includes an estimated timeline for only the feasibility study due to the specific project elements being undefined until completion of that effort. The feasibility study of the proposed lake will entail evaluation of both the technical and financial feasibility of the project.

### Table 7. Implementation Activities and Timelines for Preferred Initiatives

| Preferred Initiative | Feasibility Study | Regulatory Permitting / Environmental Compliance | Design and Construction |
|---|---|---|---|
| **Lake McConaughy Region in Keith County** | | | |
| New Marina at Lake McConaughy | 12 months | 12–18 months | 3–5 years |
| Roadway Improvements | | 6 months | 1–2 years |
| Iconic Gateway Entrance | | | 6–12 months |
| **Lower Niobrara / Northern Knox County Region** | | | |
| Weigand Marina Expansion/Retrofit | 12 months | 6–12 months | 3–5 years |
| Niobrara Landing Boat Launch | 12 months | 6–12 months | 1–2 years |
| Niobrara Event Center and Lodge | 12 months | 6–12 months | 2–3 years |
| **Lower Platte River Corridor Region** | | | |
| Upper Wahoo Creek Watershed | 1 year | 6–12 months | 5–7 years |
| Schuyler Jetty | | | |
| Lower Platte River Corridor Region Lake | 2–3 years | | |

# Appendix III

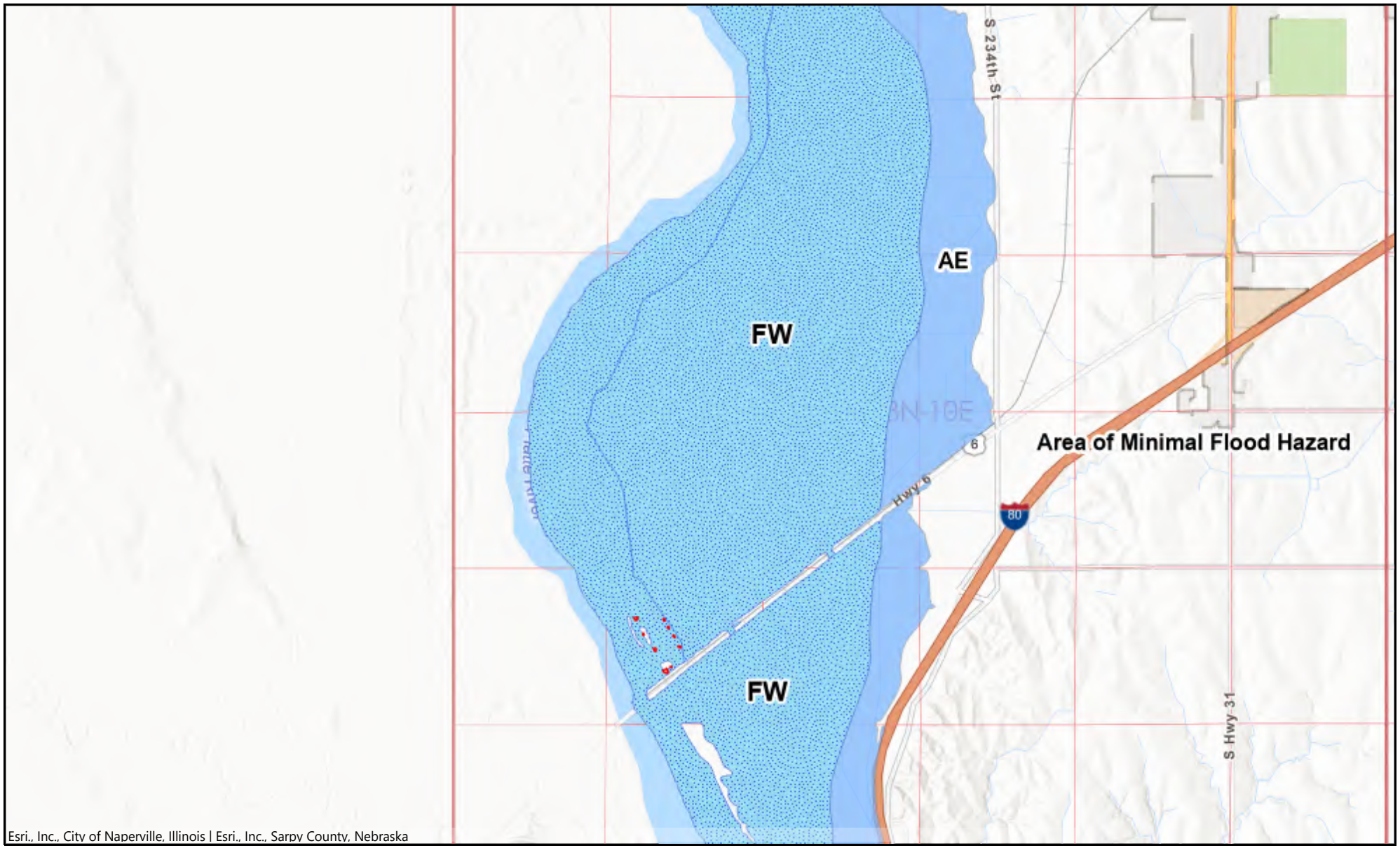
# Potential Lake Area Map

# Appendix IV

# Floodway Zone Map

SARPY COUNTY
NEBRASKA

# Map Title




Esri., Inc., City of Naperville, Illinois | Esri., Inc., Sarpy County, Nebraska

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Map Scale 1: 72224

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the source records and information sources to ascertain the usability of the information.


Notes

# Appendix V

# Bureau of Business Research at University of Nebraska-Lincoln's "Economic Analysis of Lake 80"

A Bureau of Business Research Report
From the University of Nebraska—Lincoln

# Final Report

# An Economic Analysis of Lake 80

Prepared by
Eric Thompson, Director and Professor of Economics
Mitch Herian, Project Director
Uche Jarrett, Associate Professor of Practice

Prepared for
Nebraska Recreational Lake Trust

May 30, 2024
Bureau of Business Research
Department of Economics
College of Business Administration
University of Nebraska—Lincoln
Dr. Eric Thompson, Director

# Executive Summary

A project is under consideration to develop a new recreation lake in Sarpy County, Nebraska. The lake and adjacent park facilities would represent a new amenity for Nebraska and would have a number of potential implications for the regional economy. The lake would attract new visitors and residents to Nebraska but also would be costly to build. This study from the University of Nebraska-Lincoln Bureau of Business Research (BBR) examines these economic issues for the proposed lake project, which will be referred to as Lake 80. The report contains a benefit cost analysis of the project, an economic impact assessment and a fiscal analysis.

The construction of Lake 80 and an adjacent residential and commercial development would attract an estimated 1.4 million visits to the area on an annual basis. Most of these visits would be from the Omaha and Lincoln metropolitan area but several hundred thousand visits are expected from residents of other states.

A development adjacent to Lake 80 could capture 7,000 new housing units, including both primary residences and other units used as a second home and/or as a rental property for other visitors. The majority of housing units would be occupied by households relocating from elsewhere in the Omaha and Lincoln areas, but several thousand would be new to the state.

Lake 80 would provide recreation opportunities and environmental amenities to lake users and regional residents. These benefits are compared with an estimate of lake construction costs developed by HDR, Inc. in a 2022 study. Benefits from Lake 80, while large, are found to be smaller than estimated construction costs. The relative size of benefits and costs should be reviewed further as cost estimates for the project are refined.

Construction of Lake 80 and an adjacent commercial and residential development is expected to yield a $1.3 billion economic impact during the construction period. This level of impact is associated with approximately 7,400 job-years of employment in Nebraska.

Once Lake 80 is complete and operating, there would be an annual economic impact due to out-of-state residents moving to and visiting Nebraska. The annual economic impact of new visits and residents is estimated to be $237 million per year, sufficient to support 1,500 jobs.

Private developers could take the lead in developing commercial and residential properties adjacent to the lake. A Sanitary Improvement District (SID) could be used to finance the required infrastructure. Private donations could support a significant share of park development costs.

Financing the construction of Lake 80 would be a more novel challenge. The land value premium for lots near Lake 80 would be one potential source of financing. This land value premium is estimated to be approximately $520 million. A “turnback” of state sales tax revenue could be another method to finance lake construction but would generate only about 5% of project costs. The potential for revenue from these sources should continue to be analyzed as plans for Lake 80 are refined. For example, plans for the development near Lake 80 could be modified to locate more housing on or very near the lakeshore. Lake construction plans also could be modified to reduce costs.

Table of Contents

List of Tables and Figures

## 1. Introduction

A project is under consideration to develop a new recreation lake in Sarpy County, Nebraska. The lake and adjacent park facilities would represent a new recreation amenity for Nebraska and would have a number of potential implications for the regional economy. The creation of such an amenity could add to quality of life in the region, an important consideration for a metropolitan area competing for talent within the national market. The lake also could attract and retain visitor spending in the metropolitan economy, as well as residents with an interest in living in a lakeside property. There are also fiscal considerations, given the cost of developing the lake and the revenue from and infrastructure costs of new lakeside development.

This study from the University of Nebraska-Lincoln Bureau of Business Research (BBR) examines each of these economic issues for the proposed lake project, which will be referred to as Lake 80. The report begins with a description of the project and its likely implications for the state economy. Implications include construction activity during the development of the lake and adjacent communities. There also will be new residents to the area as well as visitors who utilize the lake. Such economic implications are examined in Section 2 of the report.

The study also assesses economic benefits from the project. Benefits are recreational opportunities, scenic views and other activities made possible by a lake that bring happiness to individuals. This study uses economic analysis to estimate the value of the annual stream of benefits for lake users and regional residents. In Section 3, the value of these benefits is compared with the upfront cost of developing the lake. Construction cost estimates for Lake 80 are from a May 2022 report by HDR, Inc. entitled *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis*.

In Section 4, the study examines the potential economic impact of Lake 80. The lake project will generate a temporary impact on regional employment and business sales during construction and a more permanent economic impact when it is completed. Visitors to the lake and new residents living in a lakeside community would be the source of this ongoing impact.

Finally, in Section 5, the study examines fiscal factors, including the potential tax base generated by the Lake 80 project and whether it is sufficient to support the construction of the lake. The study also examines the broader fiscal implications of the project. For example, Lake 80 would attract new investment in real property in its vicinity, creating a potential revenue source to finance the project. However, some of this new investment would be a reallocation of spending that would otherwise occur in other parts of Nebraska.

## 2: Economic Implications

The Lake 80 project would involve a substantial upfront investment followed by population growth and new tourism activity in Nebraska. This section provides estimates of the relevant economic implications of the project.st These include the number of lake visits and visitor spending, the number of housing units built for new residents, the number of additional new housing units built for second homeowners or as rental properties, and the increase in property value in the area around the lake. Also presented is an estimate of construction spending for the Lake 80 project developed in 2022 by HDR, Inc.

### A. Construction Activity

The firm HDR, Inc. developed an estimate of investments associated with the Lake 80 project. Those estimates were included in the HDR report *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis* developed in May 2022 for the Statewide Tourism and Recreational Water Access and Resource Sustainability Committee of the Nebraska Legislature. Those estimates are shown in Table 2.1 below.

Table 2.1: Construction Cost Estimates for Lake 80 and Adjacent Developments

| Type of Spending | Amount of Spending (Millions of $) |
|---|---|
| Property Acquisition | $185.5 |
| Permitting | $26.3 |
| Lake Construction | $1,500.0 |
| Infrastructure | $406.9 |
| Park | $128.3 |
| Neighborhood | $1,024.3 |
| Total | $3,271.1 |

Source: HDR, Inc, 2022. *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis,* Table 6

HDR, Inc. (2022) estimates the total construction costs for the project at $3.27 billion, with just over half of that amount for lake construction ($1.50 billion), land acquisition ($185.5 million) and parkland ($128.3 million). Remaining costs are related to planned construction of a residential and commercial development adjacent to Lake 80 ($1.02 billion) and associated infrastructure (roads and utilities) ($406.9 million). Among the construction activity, land acquisition, lake construction and parkland development would occur in the early stages of the project, as will components of infrastructure. Neighborhood development and some associated infrastructure will occur in the years that follow. Estimates from HDR, Inc. suggest that adjacent neighborhoods could accommodate as many as 10,000 housing units, about two-thirds of which would be apartments. Commercial development would include approximately 1,900 hotel rooms, 350,000 square feet of commercial space and 285,000 square feet of mixed-use space. Commercial and mixed-use space could provide services to both residents and visitors. The HDR analysis also envisions that the area would be attractive for office development.

B. Comparison Lakes

Lake 80 has the potential to create a broad economic impact on the region. Economic changes are likely to result from increased tourism, real estate development, and general economic activity associated with retail spending. To model these various impacts, the BBR sought to identify several recreational lakes in the region that might allow researchers to understand the potential impacts that Lake 80 might have on local tourism and spending in eastern Nebraska. Researchers identified lakes that are similar in surface area as the proposed Lake 80 (about 4,000 acres), and that lie in the vicinity of both micropolitan and metropolitan statistical areas. Several lakes such as Lewis and Clark Lake (31,400 acres) and Lake McConaughy (30,000 acres) in Nebraska offer the potential to serve as comparison lakes for the analysis; however, these lakes are much larger than the proposed Lake 80, and neither lake sits near a significant population center. Consequently, researchers looked outside of Nebraska to identify appropriate comparison lakes.

Iowa recreational lakes are potential analogs for several reasons. First, as Iowa primarily sits to the east of Nebraska, the latitude of Iowa lakes is similar to lakes in Nebraska. This means that the length of boating and lake recreation seasons in Iowa is approximately the same length as those in Nebraska. For example, the average first fall freeze in Polk County, Iowa occurs on October 10[1]; the average first fall freeze in Douglas County, Nebraska occurs on October 17.[2] The last spring freeze is typically April 22 in Polk County, Iowa;[3] the last freeze date is typically April 25 in Lancaster County, Nebraska.[4]

While Iowa has a greater population base as a state, the distribution of population centers across Iowa is akin to the distribution of populations centers near the proposed location of Lake 80. Specifically, Lake 80 is proposed to be located within 50 miles of both the Omaha and Lincoln MSAs. In total, about 1.7 million people live within 90 miles of the proposed lake location, according to U.S. Census Bureau Data. There are three lakes in Iowa that the BBR has identified as potential analogs to Lake 80.

Lake Okoboji in northwestern Iowa has been specifically identified as a model for Lake 80. Lake Okoboji is close to several metropolitan regions including Des Moines, Iowa; Sioux City, Iowa; and Sioux Falls South Dakota. There are just over 1 million people living within 90 miles of the lake, according to U.S. Census Bureau Data. The size of Lake Okoboji is about 3,800 acres, similar in size to the proposed Lake 80. The lake is heavily developed with both residential and commercial properties on and near the shores.

Clear Lake in north central Iowa also offers a potential analog. The lake is about 3,700 acres in surface area. The lake sits near the Des Moines, Iowa metropolitan area, and near several other metropolitan and micropolitan areas. According to U.S. Census Bureau Data, there are nearly

[1] https://yardandgarden.extension.iastate.edu/frost-dates-iowa#polkfall
[2] https://cropwatch.unl.edu/first-nebraska-fall-freeze-early-east-late-west
[3] https://yardandgarden.extension.iastate.edu/frost-dates-iowa#polkspring
[4] https://lincolnweather.unl.edu/data/last-freeze.asp

1.3 million people living within 90 miles of the lake. The lake is also heavily developed with residential properties and with the town of Clear Lake directly on the east side of the lake.

A third potential analog can be found with Saylorville Lake in Ankeny, Iowa. At 26,000 acres of surface area, Saylorville Lake is much larger than the proposed Lake 80. The lake and associated areas are managed by the U.S. Army Corps of Engineers, which may limit the development of residential and commercial properties with the lake project boundaries. The potential usage of Saylorville Lake is great, with over 1.4 million people living within 90 miles of the lake. For the purposes of this study, Saylorville Lake is most analogous to Lake 80 in its proximity to a relatively large MSA.

These three lakes will serve as the basis for many of the estimates made in this report. In particular, visitation rates for these three lakes will allow BBR researchers to estimate potential visits to Lake 80 in Nebraska. Furthermore, the analysis of property values, obtained through county assessor websites, allows the BBR to generate estimates of potential property values for both residential and commercial properties proposed for Lake 80.

C. Lake Visits

Residents of the Omaha and Lincoln metropolitan areas and other regions of Nebraska have many options for utilizing recreation lakes. Nebraska and its neighboring state Iowa are home to a number of lakes frequently used for boating and associated activities like fishing and water skiing. Prominent examples in Iowa include the multiple lakes in the Okoboji region and Clear Lake, which is located near Mason City, Iowa. The shoreline of these lakes provide further tourism opportunities including hiking, restaurants, entertainment and shopping. Recreation lakes in Nebraska sometimes face regulations that limit development near the lake shore, but others have more opportunities. Lewis and Clark Lake is an example of a Nebraska (and South Dakota) recreation lake with development near the lake shore. Looking further away, the nearby states of Missouri and Minnesota feature many recreation lakes.

The contribution of Lake 80 is that it would provide a recreation lake within the Omaha metropolitan area, creating a local amenity for residents of the Omaha area as well as Lincoln and other areas of eastern Nebraska. Further, the development of Lake 80 would provide area residents who currently travel to alternatives such as Lake Okoboji, Clear Lake, Lewis and Clark Lake or lakes in Minnesota or Missouri with an opportunity to save time and costs by visiting a nearby recreation lake. Lake 80 also will attract boaters and other visitors from nearby states.

A specialized data set from Iowa is used to help project the total number of visits to Lake 80 each year. In particular, detailed data is available from the Iowa Lakes Project.[5] on the origin of visits to Iowa lakes, including the Okoboji area, Clear Lake and Saylorville Lake. The Iowa Lakes Project team periodically surveys state residents regarding use of more than 130 lakes, with the

[5] This is a multi-year research project of the Center for Agricultural and Rural Development at Iowa State University. The web address is https://lakes.card.iastate.edu/

most recent survey in 2019. That effort surveyed residents of Iowa as well as residents of border counties in surrounding states, including Nebraska.

The Iowa Lakes Project publishes information on its website on the number of annual day-visits to each lake by Iowa residents. A companion report (Wan, Ji and Zhang, 2021) provides additional summary information from project surveys, which the Bureau of Business Research used to estimate annual overnight visits by Iowa residents to each lake as well as annual day-trip and overnight visits by residents of neighboring states. The result was an estimate of total annual visits to each lake. In 2019, there were an estimated 788,000 visits to Clear Lake, an estimated 594,000 visits to Saylorville Lake, and an estimated 1,002,000 visits to the three largest lakes in Dickinson County, Iowa (West Okoboji, East Okoboji and Big Spirit Lakes). In terms of distance traveled, the numbers of visits from persons who travel 0-5 miles away is provided along with the number of visits from persons who travel 5-10 miles, 10-30 miles, 30-60 miles, 60-90 miles and more than 90 miles.

The number of visits originating from each distance is combined with population data to calculate the "rate" of lake visits per person each year for Clear Lake, Saylorville Lake and the three largest lakes in Dickinson County, Iowa. Specifically, the visit rate is calculated according to the formula below for a specific lake i and distance d.

> $Rate_{id}$ = ("Number of Visits to lake i traveling from distance d/Population living distance d from lake i)

Population data can be obtained at the zip code geography from the *American Community Survey* of the U.S. Bureau of Census during the 2018 to 2022 period, which contains the year 2019. Zip code data are then summed to estimate the population within 0 to 5 miles, 5-10 miles, 10-30 miles, 30-60 miles, 60-90 miles and more than 90 miles from each lake. Annual visit rates per person were calculated for each distance range using data from all three lakes. Average annual visit rates are reported in Table 2.2 below. Note that the rates within 30 miles (0-5 miles, 5-10 miles and 10-30 miles) were combined to create a common value. All three distance ranges would represent a nearby trip.

Table 2.2: Recreation Lake Visits Per Person and Predicted Visits to Lake 80

| Distance from Primary Residence | Visit Rate (Visits Per Person) | Predicted Annual Visits to Lake 80 |
|---|---|---|
| 0-5 miles | 0.76 | 3,700 |
| 5-10 miles | 0.76 | 15,800 |
| 10-30 miles | 0.76 | 912,800 |
| 30-60 miles | 0.34 | 75,800 |
| 60-90 miles | 0.19 | 52,600 |
| More than 90 miles | 0.11 | 357,400 |
| Total | | 1,418,100 |

Source: BBR calculations based on Iowa Lakes Project (Iowa State University) and U.S. Bureau of Census data

Results indicate that every 100 individuals living more than 90 miles from a recreation lake would generate 11 annual visits to that lake per year. This could be 1 visit per year by 11 different groups, 11 visits by the same group or combinations in between. The number of visits generated is higher for people living closer to a recreation lake. Nineteen annual visits would be generated per 100 people who reside 60 to 90 miles from the recreation lake and 34 visits per year per 100 people living 30 to 60 miles away. Annual visit generation rises to 76 visits per 100 persons who live 0 to 30 miles from a recreation lake.

Table 2 also shows an estimate of annual visits to Lake 80, based on the population which resides at various distances away from its planned site. The estimate is that there would be 1,418,100 annual visits to Lake 80. This is approximately 400,000 more annual visits than were identified for the 3 major lakes in Dickinson County, Iowa. The reason is that Lake 80 will be located in the Omaha Metropolitan Area, and quite near the Lincoln Metropolitan Area. As seen in Table 2.2, the rate of visits per 100 persons is much higher for individuals who live within 30 miles of a recreation lake than for individuals who live more than 90 miles away. The proposed Lake 80 is located within 30 miles of much of the Omaha metropolitan area and parts of the Lincoln metropolitan area. By contrast, Clear Lake and lakes in Dickinson County, Iowa are located in non-metropolitan areas. Specifically, Dickinson County is a rural county located in a relatively sparsely populated region of Iowa.

Among the expected 1,418,100 annual visits, nearly two-thirds (932,300) would be made by visiting parties who reside 30 or fewer miles of the proposed Lake 80 site. There also would be many visits to Lake 80 by individuals who reside outside of the Lincoln and Omaha area, including residents of other states. As seen in Table 2.2, about one quarter of expected annual visits (357,400) would be made by visitors who reside from more than 90 miles away.

These visits imply tourist spending. Surveys gathered by the Iowa Lakes Project also contained information on visitor spending. Specifically, Iowans responding to the 2019 Iowa Lakes Survey reported average spending of $35 during single-day trips to an Iowa lake and average spending of $135 on overnight trips (Wan, Ji and Zhang, 2022). Respondents to that survey from neighboring states reported average spending of $44 on single-day trips to an Iowa lake and average spending of $137 on overnight trips. These spending estimates for 2019 can be updated to 2023 based on growth in the consumer price index in midwestern states over the four year period. Data on 2023 spending also can be disaggregated by category based on spending patterns from an intercept survey of lake visitors reported in Wan, Ji and Zhang (2021). Based on the spending pattern of visitors to Clear Lake, estimates of spending per category were estimated and are reported in Table 2.3 for day-trip visits and overnight visits.[6]

[6] Weighted average day-trip values were estimated based on the share of day-trip visits by Iowa residents versus residents of neighboring states. Similar weighted averages were estimated were calculated for overnight visits.

Table 2.3: 2023 Lake Spending Per Visit

| Spending Category | Spending Per Day-Trip Visit | Spending Per Overnight Visit |
|---|---|---|
| Supplies | $12.47 | $36.83 |
| Food and Beverages | $15.06 | $44.49 |
| Gasoline | $8.66 | $25.59 |
| Lodging | $0.00 | $36.41 |
| Shipping | $4.89 | $14.44 |
| Entertainment | $0.72 | $2.12 |
| Other | $0.25 | $0.75 |
| Total | $42.06 | $160.64 |

Source: BBR calculations based on information in Wan, Ji and Zhang, 2021; 2022

Spending data in Table 2.3 can be applied to the estimated 1,418,100 annual visits to estimate total annual spending during visits to Lake 80. Most of those 1,418,100 visits are modeled to be a day-trip visit, given that the 2019 Iowa Lakes Survey found that 21.5 percent of all 2019 visits were overnight visits while 78.5 percent were day-trip visits (Wan, Ji and Zhang (2021). Based on those proportions, Table 2.4 shows the estimated total annual spending by category. The total estimated annual spend during visits is $95.7 million, with $30.3 million of that spending on food and beverages, $25.1 million on boating and fishing supplies and $11.1 million on lodging.

Table 2.4: Potential Annual Spending Due to Visits to Lake 80

| Spending Category | Estimated Annual Spending (Millions $) |
|---|---|
| Supplies | $25.1M |
| Food and Beverages | $30.3M |
| Gasoline | $17.4M |
| Lodging | $11.1M |
| Shopping | $9.8M |
| Entertainment | $1.4M |
| Other | $0.5M |
| Total | $95.7M |

Source: BBR calculations based on information in Wan, Ji and Zhang, 2021; 2022

D. New Residents

In addition to attracting tourist visits, recreation lakes attract new residents. This is best seen in data for non-metropolitan recreation lakes. Such lakes are often located in regions with small and falling populations. In such a setting, strong population growth is likely tied to the lake rather than other factors such as agglomeration which drive growth in metropolitan areas.

Table 2.5 presents population growth patterns for Dickinson County, Iowa, a rural county which is home to West Okoboji Lake, East Okoboji Lake and Big Spirit Lake, as well as patterns for

surrounding rural counties. Long-run population growth is presented for 1950 to 2023, a nearly 75 period where many areas of rural Iowa experienced significant population loss. Population data for 1950 and 2023 come from the U.S. Bureau of Census.

Table 2.5: Population Change in Dickinson County Iowa and Surrounding Rural Iowa Counties

| County | 1950 | 2023 | Change |
|---|---|---|---|
| Dickinson | 12,746 | 18,056 | 42% |
| Osceola | 10,158 | 5,978 | -41% |
| Emmet | 14,102 | 9,229 | -35% |
| O'Brien | 18,958 | 14,012 | -26% |
| Clay | 18,031 | 16,511 | -8% |
| Palo Alto | 15,284 | 8,810 | -42% |
| Total 5 Surrounding Counties | 76,533 | 54,540 | -29% |

Source: United State Census Bureau

The 5 surrounding counties largely show the familiar pattern of steep population loss seen in many areas of the Midwest farm belt. The population of Clay County dropped by just 8 percent between 1950 and 2023 but population dropped by 26 percent in O'Brien County, 35 percent in Emmet County, 41 percent in Osceola County and 42 percent in Palo Alto County. In aggregate, population declined by 29 percent in the 5 surrounding counties. By contrast, population increased by 42 percent in Dickinson County, Iowa, from approximately 12,700 in 1950 to 18,100 in 2023. Comparing this 42 percent population growth with the 29 percent decline seen in the rest of the region indicates that population growth was 70 percent faster in the county that is home to the major recreation lakes. A 70 percent faster rate of growth is equivalent to 9,000 new residents in Dickinson County.

Population trends in Clear Lake, Iowa also show a similar pattern. Table 2.6 below shows population growth in Clear Lake, the balance of Cerro Gordo County (where Clear Lake is located) and 8 surrounding rural counties in northern Iowa. The population of Clear Lake, Iowa grew by 52 percent from 1950 to 2023, but population declined in the balance of Cerro Gordo County. This decline is notable as the county also contains Mason City which is a micropolitan trade center for this region of Iowa. Nonetheless, population declined by 14 percent in the rest of the county during the 75-year period. There was an 18 percent to 39 percent population decline in the other surrounding rural counties. This 52 percent population growth in Clear Lake, the community with a recreation lake, and the 25 percent aggregate decline in the surrounding counties, suggests that Clear Lake outgrew its peers by 77 percent. This faster rate of growth is equivalent to 3,800 new residents in Clear Lake.

Table 2.6: Population Change in Clear Lake, Iowa, the Rest of Cerro Gordo County and Surrounding Rural Iowa Counties

| County | 1950 | 2023 | Change |
|---|---|---|---|
| Cerro Gordo | 45,648 | 42,406 | -7% |
| Clear Lake | 4,962 | 7,529 | 52% |
| Rest of County | 40,686 | 34,877 | -14% |
| Hancock | 15,079 | 10,615 | -30% |
| Floyd | 21,457 | 15,326 | -29% |
| Winnebago | 13,439 | 10,571 | -21% |
| Worth | 11,083 | 7,297 | -34% |
| Mitchell | 13,931 | 10,518 | -24% |
| Wright | 19,636 | 12,656 | -36% |
| Franklin | 16,287 | 9,875 | -39% |
| Butler | 17,328 | 14,172 | -18% |
| Rest of Cerro Gordo County and 8 Surrounding Counties | 168,926 | 125,907 | -25% |

Source: United States Census Bureau

Could these regional population trends simply reflect a reallocation of regional population towards the lakes? To consider this, in Table 2.7 we examine population trends in another rural region of northern Iowa that is not home to a large recreation lake. In particular, the Chickasaw, Fayette, Howard and Winneshek Counties are four adjacent counties in northeast Iowa that do not border the Mississippi river nor contain a large recreation lake or population center. Table 2.7 shows population in these four counties over the 1950 to 2023 period. The pattern of population loss in these four counties is very similar to the fall in population observed in the five counties adjacent to Dickinson County. The decline in population varies from an 8 percent drop in Winneshek County to a 32 percent decline in Fayette County. In aggregate, population in the four-county region dropped by 23 percent from 1950 to 2023.

Table 2.7: Population Change in Four Northeast Iowa Counties

| County | 1950 | 2023 | Change |
|---|---|---|---|
| Chickasaw | 15,169 | 11,658 | -23% |
| Fayette | 28,228 | 19,210 | -32% |
| Howard | 13,105 | 9,376 | -28% |
| Winneshek | 21,644 | 19,815 | -8% |
| Four County Total | 78,146 | 60,059 | -23% |

Source: United States Census Bureau

Table 2.8 averages the population impacts for Clear Lake and Dickinson County to estimate how much a recreation lake will grow the population of an isolated area. The estimate is that population would be expected to be about 6,400 higher in an isolated area with a recreation lake over the long-run. In terms of housing units, there would be approximately 3,100 additional housing units given that there is typically 0.48 to 0.49 housing units per person in Northern Iowa.

Table 2.8: Expected Housing Unit Increase in a Rural Recreation Lake of Similar Size as Lake 80

| Area | Population Increase | Housing Unit Increase |
|---|---|---|
| Dickinson County | 8,973 | 4,373 |
| Clear Lake | 3,831 | 1,821 |
| Average | 6,402 | 3,097 |

Source: United States Census Bureau and UNL Bureau of Business Research calculations

E. Additional Housing Units

Table 2.8 indicated that communities near rural recreation lakes in Iowa had 6,400 more people and 3,100 more housing units than would be expected. These housing units are primary residents for a larger local population. In addition to these units, there are also other housing units found near recreation lakes. These units might be rental properties for visitors, a "second home" for someone who lives outside of the local area or serve as a second home for part of the season and a rental property at other times.

Data on housing units and population in Dickinson County and Cerro Gordo County (home to Clear Lake) in Iowa reveal how common such additional housing units may be near a rural recreation lake. These counties have an elevated level of housing units per county resident, suggesting that many of the units could be rental units and/or second homes.

Table 2.9 shows the total number of housing units and population in Dickinson County and the 5 surrounding counties in northwest Iowa in the year 2022. Data on housing units is not yet available at the county level for the year 2023. The table also provides a calculated value for the ratio of housing units to population. That ratio is remarkably consistent in the 5 surrounding counties, in the range of 0.47 to 0.51. The average ratio across all five counties is 0.49.

Table 2.9: Housing Units Per Person in Dickinson County, Iowa and Surrounding Counties

| County | Housing Units 2022 | Population 2022 | Ratio Units/Person |
|---|---|---|---|
| Dickinson | 14,309 | 18,048 | 0.79 |
| Osceola | 2,871 | 6,072 | 0.47 |
| Emmet | 4,546 | 9,214 | 0.49 |
| O'Brien | 6,566 | 14,085 | 0.47 |
| Clay | 8,149 | 16,507 | 0.49 |
| Palo Alto | 4,512 | 8,790 | 0.51 |
| Five Surrounding Total | 26,644 | 54,668 | 0.49 |

Source: United States Census Bureau and UNL Bureau of Business Research calculations

Table 2.9 also shows the ratio of housing units per person in Dickinson County in 2022. The ratio is 0.30 higher, at 0.79. Multiplying 0.30 by the 2023 population of Dickinson County (18,048) yields an estimate of 5,500 additional units available to serve non-residents.

Table 2.10 provides a similar analysis for Cerro Gordo County and eight surrounding counties. Once again, the ratio of housing units to population is very consistent in the surrounding counties, between 0.47 to 0.49. The average ratio across all eight counties is 0.48. The ratio is higher, at 0.54, in Cerro Gordo County.

Table 2.10: Housing Units Per Person in Cerro Gordo County, Iowa and Surrounding Counties

| County | Housing Units 2022 | Population 2022 | Ratio Units/Person |
|---|---|---|---|
| Cerro Gordo | 22,789 | 42,426 | 0.54 |
| Hancock | 5,120 | 10,651 | 0.48 |
| Floyd | 7,321 | 15,348 | 0.48 |
| Winnebago | 5,067 | 10,639 | 0.48 |
| Worth | 3,475 | 7,311 | 0.48 |
| Mitchell | 4,967 | 10,544 | 0.47 |
| Wright | 6,275 | 12,695s | 0.49 |
| Franklin | 4,642 | 9,946 | 0.47 |
| Butler | 6,576 | 14,246 | 0.46 |
| Eight Surrounding Total | 43,443 | 91,380 | 0.48 |

Source: United States Census Bureau and UNL Bureau of Business Research calculations

Note that this ratio of 0.54 is very consistent with the findings presented in Table 2.9. As seen in Table 2.6, Clear Lake accounts for approximately 18 percent of the population in Cerro Gordo County. If the housing unit/person ratio is 0.79 (the ratio in Dickinson County) for 18 percent of the Cerro Gordo County population and 0.48 (the ratio or the eight surrounding counties) for the population in the rest of the county, the estimated county-wide ratio would 0.53 housing units per person. This is very similar to the actual ratio of 0.54 for Cerro Gordo County. This accounting suggests that the ratio of housing units per person is likely close to 0.79 to 0.80 in City of Clear Lake, Iowa, which is 0.31 to 0.32 above the regional average. Multiplying 0.32 by the 2023 population of the City of Clear Lake (7,529) yields an estimate of 2,600 additional housing units.

Table 2.11 shows the estimated number of primary and additional housing units in Dickinson County and Clear Lake. The table also shows the average number of additional units. The average provides an estimate of expected new housing units near a rural recreation lake about the size of Lake 80. The estimate is there would be nearly 7,200 new housing units.

Table 2.11: Total Housing Unit Increase in a Rural Recreation Lakes of Similar Size as Lake 80

| Area | Primary Housing Units | Additional Housing Units | Total Units |
|---|---|---|---|
| Dickinson County | 4,373 | 5,513 | 9,886 |
| City of Clear Lake | 1,821 | 2,619 | 4,440 |
| Average | 3,097 | 4,066 | 7,163 |

Source: United States Census Bureau and UNL Bureau of Business Research calculations

F. Property Values

Calculations displayed in Table 2.11 show that there would be a need for an estimated 7,200 new housing units near Lake 80. Some would be permanent residences while others would be used as rentals or seasonal visits by the owner. These additional properties also would generate substantial property value. Land near a recreation lake is valued for boating, fishing, waterskiing, swimming, hiking along the lake, views of the water and surrounding countryside, views of waterfowl, and other such benefits. Land directly on the lakeshore is naturally the most valuable for building homes and apartments as individuals would have constant access to the water and views. Commercial users of lots near the lake also would need to pay these higher land values. Land values would fall with distance from the lakeshore. Such a land value premium is a notable economic characteristic of recreation lakes.

To assess how proximity to a recreation lake influences property values, the research team examined land value estimates gathered from the Dickinson County and the Cerro Gordo County Assessor's Office web sites. Land values were gathered for several hundred residential properties on or near the lakeshore of Lake Okoboji and Clear Lake. Table 2.12 shows the value of land (excluding buildings and other improvements) for residential lots on the lakeshore and at various distances from the shore of the lake. The table illustrates a "distance gradient" showing how much land values decline as distance from the lake rises. Lot values are presented separately for Lake Okoboji and Clear Lake. Lake Okoboji also has canals that connect to the lake and average lot values are also presented for these properties in Table 2.12.

The location of a lot on the lakeshore has a significant impact on its value. The average value of lots on the lakeshore of West Lake Okoboji is nearly $1.3 million. Lots which are not on the lakeshore but within 200 feet were worth an average of $588,824 and even lots on a canal connected to the lake were valued at an average of $313,477. Land values fell sharply at a distance of more than 200 feet. The average value of lots fell to $93,404 at a distance of 201 to 400 feet from Lake Okoboji and $89,715 at a distance of 401 to 600 feet. The average lot value fell to $71,542 from 601 to 800 feet from the lakeshore and had a similar value further away.

The pattern was similar in the case of lots at Clear Lake. The value of lots more than 200 feet from the shore of that lake was similar to the value of lots surrounding Lake Okoboji. The primary difference was in the value of lots on the lakeshore or just adjacent to the lakeshore. The average value of lots on the shore of Clear Lake was $492,972 while the average value of lots within 200 feet of the lakeshore was $225,023.

The overall pattern is that the value of lots on or very near the shore of recreation lakes come with a high premium. Land values also are elevated for properties located on a canal connected to the lake. Land retains a smaller premium at a distance of more than 200 feet from the lake.

Note that Table 2.12 is the value of land only. The total value of the property would be much higher given the value of the building (home) and other improvements located on the land. Indeed, the size of homes (measured in square feet) placed on lots was positively correlated with the value of land/sq.ft.in the Lake Okoboji data set, indicating that larger homes were placed on the more valuable land.

Table 2.12: Average Land Value for Residential Lots at Various Distances from Lakeshore

| Location | Estimated Value of Lot by Distance from the Lake | |
|---|---|---|
| | West Okoboji Lake | Clear Lake |
| On the Lakeshore | $1,273,103 | $492,972 |
| On Canal Connecting to the Lake | $313,477 | |
| Not on the Lakeshore | | |
| 200 Feet or Less Inland | $588,824 | $225,023 |
| 201 to 400 Feet Inland | $93,404 | $96,358 |
| 401 to 600 Feet Inland | $89,715 | $85,000 |
| 601 to 800 Feet Inland | $71,542 | $75,675 |
| 800 Feet or More Inland | $72,645 | |

Source: UNL-BBR calculation

Property value impacts also can be assessed by comparing values in Dickinson County with surrounding rural counties, or between property values in Clear Lake, IA versus the surrounding area. Such comparisons would look at the aggregate value of properties including both commercial and residential properties and buildings and other improvements as well as land.

Such comparisons are made in Table 2.13 below. Specifically, the table compares the current assessed value of property in Dickinson County, Iowa as of January 1, 2023 with the estimated value that might have occurred in the absence of the county's recreation lakes. The table makes a similar comparison for the City of Clear Lake, Iowa.

Table 2.13: Property Value Impact Estimates for Recreation Lakes

| Area | Current Property Value (July 1, 2023) (millions of $) | Hypothetical Property Value (millions of $) | Difference (millions of $) |
|---|---|---|---|
| Dickinson County, Iowa | $3,861.4 | $831.1 | $3,030.2 |
| Clear Lake, Iowa | $793.6 | $302.6 | $491.0 |

Source: Iowa Department of Management – Local Government Property Valuation System and UNL Bureau of Business Research calculations

Focusing on Dickinson County, the assessed value of property reflects population growth (42 percent population growth from 1950 to 2023), and a high value of property per resident ($214,000). The presence of recreation lakes contributed to these statistics. The hypothetical "alternative" value in Table 2.13 considers what may have happened in Dickinson County in the absence of recreation lakes. In the alternative scenario, the population trends would match those in the surrounding counties (a 29% population decline), and per capita property values would match those found in the surrounding region ($91,500). The difference between current property values and the "hypothetical" alternative scenario is $3.03 billion in property value.

A similar calculation also was made in Table 2.13 for the case of the City of Clear Lake, Iowa. The current value of taxable property as of January 1, 2023 is compared with the expected value in a hypothetical alternative where Clear Lake is not present. The current assessed value reflects

population growth (52 percent growth from 1950 to 2023) and a somewhat higher value of property per resident ($105,400). The hypothetical "alternative" value assumes that that population trends in the City of Clear Lake matched those of the surrounding area (a 25% population decline) and per capita property values matched the surrounding region average ($81,800). The difference between current property values and the "hypothetical" alternative scenario is approximately $500 million.

Taken together, the comparisons in Table 2.13 show a residential and commercial development near a new recreation lake will substantially increase local taxable property. The increase could be as much as $3 billion. However, the increase in taxable property is not always that large. Clear Lake is a popular recreation lake; however, taxable property values are just $500 million more than would be expected in a similar area without a recreation lake.

## G. Suburban Development

The previous analysis considered visits, visitor spending and housing development anticipated in developments adjacent to Lake 80. Estimates of housing development, in particular, were based on activity in the Okoboji region as well as in Clear Lake, Iowa. These are rural or micropolitan regions. Lake 80, by contrast, would be located within the Omaha metropolitan area, with a metro with a population approaching one million persons. Lake 80 also is close to the Lincoln Metropolitan area, with a population of 350,000. Due to this proximity, there is potential for a community adjacent to Lake 80 to also benefit from suburban development, complementing its development as a recreation and tourism hub.

Lake 80 would be located in the western suburbs of Omaha. Those suburbs are growing rapidly. For example, the population of the City of Gretna grew by 3,200 persons during the last decade, according to Bureau of Census data. Residents of these communities have ready access to employment centers in both Douglas and Sarpy counties. The area is also appealing to households with one member working in the Lincoln area and another working in the Omaha area. A residential and commercial development adjacent to Lake 80 would provide another option to would-be residents of this suburban Omaha region.

As a suburban development, a community adjacent to Lake 80 would need to be cost competitive with other suburban areas. Data provided in Table 2.12 suggests that it could be. The table shows a large property value premium for land located on or near a recreation lake shore, or in a canal with access to the lake. However, the land premium falls substantially for property located a thousand feet or more from the lake. Homebuyers or renters in the Omaha or Lincoln area may choose to pay for a property on or close to the lakeshore if the premium is worth the expense from their perspective. But others would have the option to locate in the vicinity of the lake but without paying a large premium. A larger commercial and residential development near Lake 80 with thousands of homes and associated businesses would provide both types of opportunities to Nebraska residents.

This would represent a reallocation of Nebraska population so it would not contribute to the economic impact of the project. However, suburban development adjacent to Lake 80 would generate new taxable property and sales in the community. If this tax base is ultimately utilized to help fund lake construction, the reallocation of suburban development adjacent to Lake 80 could contribute to the tax base to support that expense.

3: Benefit Cost Analysis

Lake 80 would provide recreation opportunities and environmental amenities to lake users and regional residents. In this section, economic analysis is used to estimate the annual dollar value that individuals place of these benefits. Annual values are then summed to show the estimated present value of recreation and environmental benefits. Finally, the present value of project benefits is compared to the present value of project costs.

A. The Present Value of Project Benefits and Costs

Infrastructure investment projects typically involve large upfront capital expenditures that yield benefits for decades to follow. The concept of present value is used to compare the stream of project benefits and costs. The present value approach converts future costs and benefits back to their value in the present based on an interest rate (known as the discount rate). For example, if construction of a lake would cost $1 billion evenly split over a 2-year period, then the first-year costs (year 0) would not be adjusted but the second year of construction costs (year 1) would be discounted by the relevant rate, typically between 5% to 7%. Assuming a 7% discount rate, the present value of construction costs over the two years are $500 million + $500 million/1.07 = $500 million + $467.3 million = $967.3 million. Continuing this example, the lake would be completed and in use beginning in Year 2 and would yield net benefits in that year; that is, gross benefits (described below) less any annual operating costs. If those net benefits were $50 million in Year 2, their present value would be $50 million/(1.07*1.07) = $43.7 million.

Annual net benefits will accrue into the future as long as the Lake is in use. Net benefits in all future years would need to be discounted into the present value. The present value from all future years would be summed to yield the present value of all future benefits. The present value of future benefits would then be compared to the present value of lake construction costs. This comparison is the benefit and cost analysis. Of particular interest is whether the present value of future net benefits is as large as or larger than the present value of construction costs.

B. Types of Benefits

The gross annual benefits of a recreation lake such as Lake 80 would be derived from three primary sources: use value, option value and existence value.

**Use value** is the most intuitive. It is the benefit that Lake 80 would generate for households which use the lake. The economic concept of consumer surplus is key to understanding use value. Consumer surplus is the difference between the amount that boaters and other lake users would be willing to pay to use the lake and park minus the cost that they must pay to use it. The cost for using Lake 80 for most users is the travel cost back and forth between home and the lake. This involves the value of time for vehicle occupants traveling to the lake and costs of gas and vehicle wear and tear during the trip. For permanent residents of a lake community, use value is captured in the land value premium for property adjacent to the lake.

Travel time is estimated as part of efforts to evaluate use value for visits. The research team has estimated the expected number of annual visits to Lake 80, in total and for users 0 to 30 miles, 30

to 60 miles, 60 to 90 miles and more than 90 miles from Lake 80. Economic literature also is a source of information about use value.

**Option and Existence Value** would be additional benefits that accrue to households that would not necessarily utilize Lake 80 but would still place value on it. Option value includes the value that households place on having the option to use Lake 80. Existence value is the value individuals place on developing Lake 80 even though they are not expecting to use it. These latter individuals are simply pleased that it is present and contributing to the quality of life in Nebraska. Economic literature is a potential source for information about the option value and existence value of a recreation lake.

C. Estimates of Annual Benefits

Estimates of the use value for potential trips to Lake 80 can be estimated based on values developed in the economic literature as well through travel costs, such as those reported in Table 2.2. In terms of economic literature, Darby, Poudyal, Frakes and Joshi (2021) studied visitors to Lake Canton, a boating and fishing lake located in Oklahoma. Eighty percent of visitors to Lake Canton reported engaging in boat or bank fishing. A similar percentage of visiting groups to Lake Okoboji and Clear Lake reported engaging in boating or fishing, according to the Iowa Lakes Project. Darby, Poudyal, Frakes and Joshi (2021) estimated user benefits per trip based on a 2021 survey of lake visitors. Specifically, an econometric analysis compared the number of annual trips and the cost of traveling to Lake Canton, which varied based on how far survey respondents lived from the lake. Analysis estimated that use value per trip was $100. This is equivalent to $115.26 in 2024 dollars.

Most visitors to Lake Canton were engaged in fishing and or boating. Two other studies were identified which examined the use value of a lake from the point of view of other trip purposes such as hiking. Some visits to Lake 80 also would have this purpose. Indeed, a larger share of visit groups to Saylorsville Lake located in metropolitan Des Moines reported being engaged with viewing wildlife or hiking rather than participating in boating or fishing. Saylorsville Lake has a large share of visits from its surrounding metropolitan area, as is expected for Lake 80. Valuations based on environmental use value therefore are also relevant for Lake 80. The two studies were from Europe and North America. A study from the Netherlands (Baarsma, 2003) examined a nature reserve including a lake while a study from Canada (Kruetzwiser, 1981) examined a marsh on the edge of a lake. Use value estimates from these two studies are converted into U.S. dollars for the year 2024. The use value averaged $27.80 in current dollars.

A travel cost analysis also was conducted to develop an estimate of use value per potential trip to Lake 80, by comparing the frequency of trips with travel costs. Table 3.1 repeats information from Table 2.2 showing the ratio of predicted trips to Lake 80 per person residing at various distances from the lake. The table also provides an estimate of round-trip travel costs for visits from various distances. Travel cost estimates relied on the approach of Darby, Poudyal, Frakes and Joshi (2021), who estimated per mile vehicle costs of $0.23 in 2018 and recommend valuing the time costs at one-third of the wage rate. Following that method, per mile travel costs were

estimated to be $0.43 in Nebraska in 2023.[7] Table 3.2 also reports the round-trip travel costs at the midpoint of each distance range. Trip costs per visit are converted into trip costs per visitor (per person in the visiting party) by dividing trip costs per mile by 2.46 persons per household. Per person round-trip costs were as little as $0.87 for trips from 0 to 5 miles and were $26.22 per person for trips of 60 to 90 miles. The value for trips of 90 miles or more was estimated based on a trip distance of 135 miles (270 miles per round-trip).

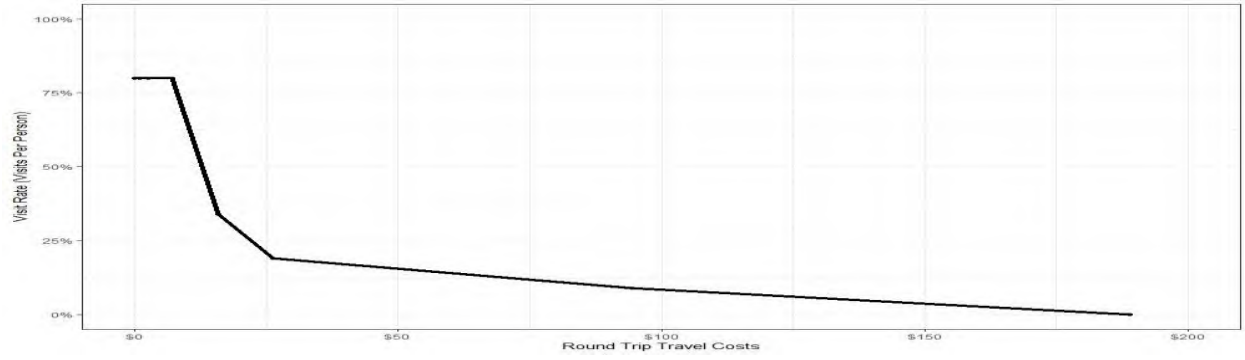
Table 3.1: Annual Recreation Lake Visits Per Person and Predicted Visits to Lake 80 Based on Distance from Primary Residence

| Distance from Primary Residence | Visit Rate (Visits Per Person) | Round-Trip Travel Costs Per Person at Midpoint of Range |
|---|---|---|
| 0-5 miles | 0.76 | $0.87 |
| 5-10 miles | 0.76 | $2.62 |
| 10-30 miles | 0.76 | $6.99 |
| 30-60 miles | 0.34 | $15.73 |
| 60-90 miles | 0.19 | $26.22 |
| More than 90 miles | 0.11 | $94.39 |

Source: CARD, ISU: Iowa Lakes Project and U.S. Bureau of Census

Figure 3.1 shows lake visits per person at different distances from a household's primary residence. The probability of a visit per person falls as round-trip travel costs rise, creating a "survivor curve" showing the frequency of making a visit as travel costs rise. The survivor curve is based on data in Table 3.1. Note that estimated visits per person is assumed to reach 0% at travel cost of approximately $190, based the trends in the visit rate seen in Table 3.1 Use value is equal to the area under this survivor curve, which is estimated $28.29 for each person on the trip. The use value for all persons on the trip is estimated to be $69.58.

Figure 3:1: Survivor Curve for a Trip Per Year




[7] Vehicle costs per mile from 2018 were updated to 2023 values using the consumer price index for the Midwest. Time costs per mile of travel were estimated for 2023 assuming travel at 60 miles per hour (including stops) and the average annual hourly wage of $27.92 in Nebraska (as of May 2023). Wage and consumer price index data were gathered from the United States Bureau of Labor Statistics.

The economics literature provided an estimate that the use value per trip to a boating and fishing lake was $115.26 in 2024 dollars, while the use per lake area trip more focused on hiking or observing wildlife was $27.80 in 2024 U.S. dollars. Analysis in Figure 3.1 based on visits to Lake Okoboji, Clear Lake and Saylorsville Lake found that use value per trip would be $69.58 in 2023 dollars ($71.84 in 2024 dollars). These lakes collectively offer opportunities for boating, fishing, observing wildlife and hiking. The simple average of these three values is $71.63. This per trip value can be applied to the predicted number of trips to Lake 80 (Table 2.2) to estimate the annual use value of Lake 80 across all visits. Multiplying 1,418,100 annual visits by a use value of $71.63 per visit yields an annual use value estimate of $101.6 million.

Option and existence values for a recreation lake were identified in the economics literature. Lacie ,et al. (2012), Schaafsma, Brouwer and Rose (2012), Schaafsma and Brouwer (2013), Schaafsma and Brouwer (2020) estimated option value for households for lake activities such as fishing, swimming, beach access and enjoying the environment. The annual option value per household was estimated to $348 based on this research. This annual value is applied to approximately 100,000 households, based on the expectation of 1.06 million lake visits each year by visitors who live within 90 miles (Table 2.2) of the planned lake site and estimates from the Iowa Lakes Project that households that utilize lakes average10.2 day-visits per year. The result is an estimated annual option value of $36.2 million per year.

Lienhoop and Messner, (2009) estimated the existence value of households for lakes. The annual existence value per household was estimated to be $12.23. This annual value is applied to approximately 600,000 households, based on the total number of households who live within 90 miles of the planned lake site less the households assigned an option value. The result is an estimated existence value of $7.3 million per year.

The total annual value including use, option and existence value is estimated to be $145.0 million.

These estimates of value were based on lake visits, but some households will access lake amenities by purchasing a primary home or renting an apartment near the lake. The value of the lake for such permanent residents would not be reflected in the estimates above. However, the value of lake access for residents can be measured by other means, specifically through the premium value of land located adjacent to the lake. The premium, or elevated value, of adjacent land reflects the extra value that homebuyers (or renters) place on living near the lake and using its attributes on an ongoing basis. The analysis described in Section 5 of this report estimates that the land value premium expected for Lake 80 would be $47,500 per lot of land. Multiplying this amount by the expected 3,097[8] households drawn to a permanent residence near Lake 80 yields an estimate that Lake 80 will generate a use value for these households of $147.0 million. This is a total value rather than an annual value.

[8] This figure excludes housing units that purchased as second homes or rentals, which would be used during visits, and housing units purchased as part of suburban development.

D. Present Value Comparisons

Construction of Lake 80 is estimated to cost $1.5 billion, and development of adjacent parkland would cost $128.3 million, according to HDR, Inc (2022), and as reported in Table 2.1. That table also indicates the lake construction project would have property acquisition costs of $185.5 million and permitting costs of $26.3 million. The total cost for lake construction would therefore be $1.84 billion.

The present value of lake construction costs is reported in Table 3.2. Property acquisition and permitting is assumed to occur in the initial year of the project (Year 0). Present value equals cost in Year 0. Lake (and park) construction is expected to occur over the next 7 years. Table 3.2 shows the estimated present value of construction costs, assuming that costs are spread evenly over the 7-year period and utilizing a 7% discount rate. The estimated present value of construction costs is $1.47 billion.

Table 3.2: Present Value of Relevant Construction Costs

| | | Construction Spending (Millions of $) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Cost Type | Total | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
| **Cost**s | | | | | | | | | |
| Property Acquisition | $185.5 | $185.5 | | | | | | | |
| Permitting | $26.3 | $26.3 | | | | | | | |
| Lake/Park Construct | $1,628.0 | | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 |
| Total | $1,839.8 | $211.8 | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 | $232.6 |
| | | | | | | | | | |
| **Present Value** | | | | | | | | | |
| Property Acquisition | $185.5 | $185.5 | | | | | | | |
| Permitting | $26.3 | $26.3 | | | | | | | |
| Lake/Park Construct | $1,253.6 | | $217.4 | $203.2 | $189.9 | $177.5 | $165.9 | $155.0 | $144.9 |
| Total | $1,465.4 | $211.8 | $217.4 | $203.2 | $189.9 | $177.5 | $165.9 | $155.0 | $144.9 |

Source for Total Construction Spending: HDR, Inc., 2022. *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis* (May), Table 6. UNL-BBR allocated spending to specific years and calculated present value.

Table 3.3 shows the present value of annual benefits. These benefits occur over a 30-year period (year 8 through year 37). The table shows total present value as well as the present value of annual benefits in select years: Year 8, Year 17, Year 27 and Year 37. Note that the present value of benefits is substantially lower in Year 37, due to discounting[9] The value in Year 8 also

[9] Benefits would likely continue beyond Year 37, but it is convention to stop benefit costs analysis after a 30-year period, especially since the present value of benefits falls substantially with discounting after 30 years. Continuing the analysis beyond 30 years would add little to the total present value of project benefits.

includes the property value premium for permanent residents at the lake. This property value captures future use value for permanent residents. The total present value is $1,206.3 million.

Table 3.3: Present Value of Annual Lake Benefits

| Type | Total (Millions of $) | Annual Benefits in Select Years (Millions of $) | | | |
|---|---|---|---|---|---|
| | | Year 8 | Year 17 | Year 27 | Year 37 |
| Value of Benefits | | $292.0 | $145.0 | $145.0 | $145.0 |
| Present Value of Benefits | $1,206.3 | $170.0 | $45.9 | $23.3 | $11.9 |

Source: UNL-BBR calculations

The present value of benefits ($1,206.3 million) should be compared with the present value of costs ($1,465.4 million). Project benefits are substantial but are less than project costs. The relative size of benefits and costs should be reviewed further as cost estimates for the project are refined.

4: Economic Impact

The potential economic impact of Lake 80 flows from the additional economic activity in Nebraska during the construction of the lake and surrounding developments as well as the annual impact once the lake is completed and in use. The distinction is important. Economic impacts during the period when the lake is built are concentrated in a different set of industries (construction) than the impacts during annual operations (hospitality businesses).

A. Construction Period Impact

The economic impact during the construction period would depend on the cost for designing and building Lake 80, and the source of funds to support lake development. In particular, construction activity supported by state and local tax dollars would not necessarily contribute a net economic impact to the state.

Table 4.1 repeats the information on project construction costs developed by HDR, Inc. (2022). The table also breaks total lake construction costs into the cost for construction activity and the costs for engineering and design services. The engineering component is assumed to be 10 percent of total lake construction costs. Engineering costs are also broken out for neighborhood infrastructure. Infrastructure costs include the design and placement of a variety of structures. Engineering and design costs account for 25 percent of the total infrastructure costs.

Table 4.1 also provides UNL-BBR expectations about whether each construction element will have an external source of funds. External sources include spending by out of state residents, or revenue from donations, which could be made to organizations throughout the country. The funding source is partially external in almost all cases. A brief explanation is provided below for each spending category.

Table 4.1: Construction Cost Estimates for Lake 80 and Adjacent Developments

| Type | Construction Spending (Millions of $) | Funding Source | Location of Business Activity |
|---|---|---|---|
| Property Acquisition | $185.5 | Partially External | In Nebraska |
| Permitting | $26.3 | Partially External | Either In-State or Out of State |
| Lake Construction | $1,500.0 | | |
| Engineering | $150.0 | Partially External | Either In-State or Out of State |
| Construction | $1,350.0 | Partially External | In Nebraska |
| Infrastructure | $406.9 | | |
| Engineering | $101.7 | Partially External | Either In-State or Out of State |
| Construction | $305.2 | Partially External | In Nebraska |
| Park | $128.3 | External | In Nebraska |
| Neighborhood | $1,024.3 | Partially External | In Nebraska |
| Total | $3,271.1 | | |

Source for Construction Spending: HDR, Inc., *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis*, Table 6. UNL-BBR broke out total spending for Lake Construction and Infrastructure into spending for engineering and construction.

Property Acquisition – Purchases of land will be partially supported by external sources, such as land purchases by out of state homebuyers or commercial businesses partially supported by out of state visitors. There also could be donations to partially support property purchases. Lastly, in the case of property acquisition, only the cost of real estate services and related transaction costs contribute to the economic impact, not the value of the land itself.

Permitting and Lake Construction – If property is taxed to support lake construction, these costs will be partially supported by external sources, such as land purchases by out of state homebuyers or commercial businesses partially supported by out of state visitors. There also could be donations to partially support construction.

Infrastructure – Infrastructure would be needed for the planned neighborhoods adjacent to the lake. Local taxes and special assessments would pay for the infrastructure. Once again, this revenue source would be external if the fees are charged on out-of-state homebuyers or by a hospitality business to the extent those businesses are supported by out of-state visitors.

Neighborhood – This is partially external for the same reason infrastructure is partially external.

Park – Donations, an external source, is expected to finance a significant share of construction.

Another issue is whether each component of construction spending will occur in Nebraska. Construction spending to build the lake itself or for infrastructure like roads or water systems will occur in Nebraska but design and engineering activity could occur out of state. Activity that occurs out of state would have an impact on another state's economy. Table 4.1 also lists which activities would occur in-state and which could potentially occur out of state.

The expectation is that 25% of infrastructure and neighborhood construction costs would be financed by out-of-state homebuyers and visitors, or homebuyers and visitors who are retained in Nebraska. Analysis in Section 2 estimated that 33.1% of visitors and homebuyers attracted to the recreation opportunities at Lake 80 would be from out of state or retained Nebraska residents who would have otherwise chosen to live out of state. These would account for nearly three-quarters of the envisioned housing units at the development with the remaining units occupied due to the ongoing suburban development in the Omaha area. A value near 25% results from applying the 33.1% rate to three-quarters of housing units and 0% to the remaining housing units

All park construction costs are expected to be from external sources such as donations. It is also expected that 25% of land acquisition, permitting and lake construction costs would come from external sources, since these costs also could be partially financed with taxes and fees on new residents and visitors (see Section 5). Likewise, a portion of any remaining construction and land purchase costs also may come from external sources such as donations. Finally, for permitting and engineering activity, 63.45% of business activity is modeled to occur in-state, based on available regional averages.

Table 4.2 shows the direct impact from each category of construction activity. The direct impact is determined by the share of that activity expected to be funded by an external source, adjusted by the proportion of the activity which is expected to occur in state. The total direct output

impact during the construction period is $849.4 million. The spending would occur during an 8-year period.

Table 4.2: Direct Economic Impact of Lake 80 Construction

| Type | Construction Spending (Millions of $) | Share External (Millions $) | Direct Impact (Millions $) |
|---|---|---|---|
| Property Acquisition | $185.5 | 2.5% | $4.6 |
| Permitting | $26.3 | 25.0% | $6.6 |
| Lake Construction | $1,500.0 | | |
| Engineering | $150.0 | 15.9% | $23.8 |
| Construction | $1,350.0 | 25.0% | $337.5 |
| Infrastructure | $406.9 | | |
| Engineering | $101.7 | 15.9% | $16.2 |
| Construction | $305.2 | 25.0% | $76.3 |
| Park | $128.3 | 100.0% | $128.3 |
| Neighborhood | $1,024.3 | 25.0% | $256.1 |
| Total | $3,271.1 | | $849.4 |

Source for Construction Spending: HDR, Inc., *Plan Preserve Play: Lower Platte River Area Economic Impact Analysis*, Table 6. UNL-BBR broke out total spending for Lake Construction and Infrastructure into spending for engineering and construction.

The direct economic impact of construction can be measured in terms of total business activity (output), employment and labor income. The output impact is $849.4 million. The employment and labor income impact associated with that output impact is estimated using the IMPLAN model. The IMPLAN model includes information on output, employment and labor income in all Nebraska industries and industry averages can be applied to the direct impact in terms of output to yield the direct impact in terms of employment and labor income.

Beyond this direct economic impact, there is an additional "multiplier" impact related to the construction of the lake. The multiplier impact results both as 1) construction, engineering and other businesses directly involved in lake development purchase supplies and services from other Nebraska businesses and 2) as employees of these construction and engineering businesses spend their paychecks within the state. Further, in the case of out-of-state workers brought in to help with lake construction, the economic impact would flow from their spending in Nebraska on items such as lodging and meals. Multiplier impacts also would be estimated using IMPLAN. That model develops multiplier estimates for states which show the ratio between the direct spending on construction or engineering and multiplier spending in the rest of the economy.

Direct impacts are added to multiplier impacts to yield the total economic impact. The total economic impact also can be estimated in terms of labor market concepts such as employment and labor income. Labor income includes employee wages, salaries and benefits. Total economic impacts are reported in Table 4.3. The total economic impact on Nebraska during the 8-year

construction period is $1.34 billion. This economic impact includes $0.46 billion in labor income earned during an estimated 7,420 job-years.[10]

Table 4.3: Direct Economic and Total Impact of Lake 80 Construction

| Type | Direct Impact (Millions $) | Multiplier Impact (Millions $) | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Job-Year |
|---|---|---|---|---|---|
| Property Acquisition | $4.6 | $4.1 | $8.7 | $1.4 | 44 |
| Permitting | $6.6 | $5.1 | $11.7 | $4.5 | 61 |
| Lake Construction | | | | | |
| Engineering | $23.8 | $21.0 | $44.8 | $19.0 | 247 |
| Construction | $337.5 | $120.3 | $457.8 | $129.6 | 2,025 |
| Infrastructure | | | | | |
| Engineering | $16.2 | $14.3 | $30.5 | $12.9 | 168 |
| Construction | $76.3 | $37.8 | $114.1 | $23.7 | 312 |
| Park | $128.3 | $107.5 | $235.8 | $86.9 | 1,470 |
| Neighborhood | $256.1 | $184.7 | $440.8 | $179.4 | 3,094 |
| Total | $849.4 | $494.8 | $1,344.2 | $457.4 | 7,420 |

Source: UNL-BBR calculations using IMPLAN

B. Annual Economic Impact

The annual economic impact of Lake 80 on the Nebraska economy would be derived from two primary sources. The first would be the visitor spending as residents of the region travel to Lake 80 for recreational opportunities during day visits and overnight trips. The second would be the increase in population in Nebraska due to the planned residential development adjacent to Lake 80. Each of these potential impacts is examined in more detail below.

In Section 2, it was estimated that the proposed Lake 80 would have a total of 1,418,100 annual visits based on recreation lakes in neighboring states. Those visits would generate an estimated $95.7 million per year in visitor spending on fishing and boating supplies, food and restaurants, lodging and other recreation spending. Further, it was estimated that 33.1% of annual trips to Lake 80 would be by residents of another state, or a "retained" trip by a Nebraska household, that is, a trip to Lake 80 that would have otherwise been taken to an out of state lake. This share implies that there would be an estimated $31.7 million ***increase*** in annual visitor spending or retained resident spending in Nebraska if Lake 80 is built. Table 4.4 shows the breakdown of that new annual spending based on patterns discussed in Section 2.

[10] A job-year is the equivalent of a full-year of employment. For example, a short-term construction project that employs two persons for six months would create the equivalent of 1 job-year. To give another example, a construction project that employs two people but lasts for three years would create 6 job-years.

Most of this increased spending would provide a direct economic impact on the state economy. The exception is spending on retail items such as boating, fishing or camping supplies or gasoline and general shopping. Such retail items are manufactured around the United States and in many cases around the world. The wholesale value of these products, therefore, does not represent Nebraska production. State economic activity is captured in the "mark-up" portion of sale prices. The mark-up supports store operations and Nebraska employment. The mark-up portion is therefore the direct economic impact on the Nebraska economy for retail sectors. After this adjustment, the total direct economic impact of visitor spending is $21.4 million per year.

Table 4.4: Estimated New Annual Visitor Spending in Nebraska Due to Lake 80

| Spending Category | Estimated Annual Spending (Millions $) | Direct Impact (Millions $) |
|---|---|---|
| Supplies | $8.3M | $4.1M |
| Food and Beverages | $10.0M | $10.0M |
| Gasoline | $5.5M | $1.4M |
| Lodging | $3.7M | $3.7M |
| Shopping | $3.3M | $1.4M |
| Entertainment | $0.5M | $0.5M |
| Other | $0.2M | $0.2M |
| Total | $31.7M | $21.4M |

Source: BBR calculations

As with construction spending, there is also a multiplier impact. Hospitality businesses patronized by Lake 80 visitors would buy supplies and services from other Nebraska businesses. Employees also would spend their paychecks throughout the state economy. The resulting multiplier impact at other Nebraska businesses should be added to direct economic impacts to yield the total annual economic impact of Lake 80 visits on the Nebraska economy.

Table 4.5 again displays the direct annual economic impact of visits to Lake 80 and also shows the multiplier impact and the total economic impact, as well as the total impact in terms of labor income and employment. The total annual economic impact is $38.3 million. More than half of that total impact is due to the direct economic impact but approximately 45 percent is due to the multiplier impact. The multiplier impact can be thought of as the additional business sales occurring in the Omaha area outside of the hospitality businesses located in the vicinity of Lake 80. That total annual economic impact would include $11.8 million in labor income each year earned in an estimated 335 jobs. The largest annual impact would be due to the sale of food and beverages and the second largest would be from lodging.

The annual economic impact due to visitor spending would be the first component of the annual impact of Lake 80. Another key component would be the impact of new residents moving to planned the residential and commercial development near the lake.

Table 4.5: Direct and Total Annual Economic Impact of Visits to Lake 80

| Type | Direct Impact (Millions $) | Multiplier Impact (Millions $) | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Employment |
|---|---|---|---|---|---|
| Supplies | $4.1M | $3.6M | $7.7M | $2.7M | 81 |
| Food and Beverages | $10.0M | $7.8M | $17.9M | $5.0M | 146 |
| Gasoline | $1.4M | $1.1M | $2.5M | $0.6M | 15 |
| Lodging | $3.7M | $2.6M | $6.3M | $2.0M | 47 |
| Shopping | $1.4M | $1.3M | $2.7M | $1.0M | 26 |
| Entertainment | $0.5M | $0.4M | $0.9M | $0.4M | 14 |
| Other | 0.2M | $0.1M | $0.3M | $0.1M | 5 |
| Total | $21.4M | $17.0M | $38.3M | $11.8M | 335 |

Source: UNL-BBR calculations.
Note: The direct impact and multiplier impact may not precisely sum to total impact due to rounding.

New residential development adjacent to Lake 80 is expected to support 3,097 primary new housing units for residents as well as 4,066 “additional” homes, as was calculated in Section 2. The economic impact of additional homes is captured in part in the prior analysis of trip spending. Recall that an Iowa State University survey of Iowa and neighboring state residents was the source of information on lake visits. Respondents to that survey would have included some second homeowners who reported their annual lake visits. Additional homes also will sometimes be used as rental properties or at least rented out at times when not in use by their owner. However, that activity would have been part of the estimated visitor spending on lodging in Table 4.5 above. The larger point is that second homeowners will only spend a portion of the year living in their second home, rather than renting it out. For the purpose of economic impact analysis, second homeowners are modeled to live in their “additional” home one month out of the year.

New residents, by contrast, live in their primary home over the course of the year. The estimated 3,097 primary residences would house families who would contribute to local spending and in some cases, add to the state labor force. These new residents living along Lake 80 would include both persons moving to the Omaha area for an opportunity to live next to a recreation lake, as well as residents of the Omaha Metropolitan Area, Lincoln Metropolitan Area or other nearby regions of Nebraska choosing to move locally to a home on Lake 80. In other words, primary homeowners would represent a mix of new and existing residents for Nebraska.

Primary residents would be drawn from the same region which sends visitors to Lake 80. Many would be from the nearby Omaha and Lincoln areas. Individuals living in these areas could choose to live near Lake 80 much like they would choose between living in the City of Lincoln or Omaha or a suburban area near each city (Omaha has suburban areas located in Iowa). Lake 80 would be another living option that would not require a change in job or moving away from friends or, in many cases, family. Other primary residents would be drawn from the wider region

including residents moving from Iowa, South Dakota, Missouri and Kansas. New residents could even include former Nebraska residents living at a nearby recreation lake who are drawn back to Nebraska to live at Lake 80. Such moves from a distance may be less common than local moves but would occur due to the strong draw of recreation lakes, just as predicted for lake visits. The estimated location pattern for lake visits is therefore also useful as an estimate for these moves and it is assumed that 33.1% of new residents at Lake 80 would be from the Iowa suburbs of Omaha, other areas of adjacent states, or even former Omaha area residents drawn back to the state. This amounts to an estimated 1,025 new households for Nebraska. Similarly, about one-third of owners of "additional" homes, 1,346, would be new to Nebraska.

Table 4.6 provides estimates of the annual spending of these households. Specifically, the table shows the expected annual household spending from 1,025 new Nebraska households and the monthly spending of 1,346 owners of "additional" homes. Given the expense of buying a new home, homeowners are modeled to be higher income. Specifically, the top one-sixth of Nebraska households earn $150,000 per year or more (American Community Survey, 2024). Many homeowners at Lake 80 are assumed to be in this income group. Half of these homeowners would be in a household with income between $150,000 and $200,000 per year and the other half in a household with annual income at $200,000 or above. Households with an income at $200,000 or above have an average income of $331,000.[11]

Table 4.6 shows the total annual income for primary and additional homeowners while residing in Nebraska. Recall that owners of additional homes are modeled to reside at their home for one month while primary homeowners are year-round residents. Table 4.6 also shows the total economic impact generated by expected households spending, in terms of output (business sales), labor income and employment. These economic impacts are again estimated utilizing the IMPLAN model, which adjusts for the behavior of high-income households, particularly for the probability that the high-income households will save, rather than spend, a significant portion of their household income and will spend some of the income out of state on vacation or for other reasons.

There is an estimated $287.9 million in additional household income earned each year when Lake 80 primary and secondary homeowners are in residence in Nebraska. This income leads to an additional $198.7 million in annual economic output (business sales) in the state, as seen in Table 4.6. There is an estimated $115.4 million in labor income earned as part of these business sales which is sufficient to support 1,126 full-year equivalent jobs.

[11] Eight percent of Nebraska households earned between $150,000 and $200,000 in 2022 and 8 percent earned over $200,000. The average earnings of households earning more than $200,000 per year is estimated to be $331,000, the amount of income that would allow modeled mean household income to equal the value for mean household income reported by the Bureau of Census.

Table 4.6: Direct and Total Annual Economic Impact on Nebraska from Lake 80 Primary Housing Units and Additional Homes

| Type of Unit | Household Income While Residing in Nebraska | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Employment |
|---|---|---|---|---|
| Primary Residence | $259.5M | $179.1M | $104.0M | 1,015 |
| Additional Unit | 28.4M | $19.6M | $11.4M | 111 |
| Total | $287.9M | $198.7M | $115.4M | 1,126 |

Source: UNL-BBR calculations

Table 4.7 shows the total annual economic impact from both increased visits and new homeowners in Nebraska. There is a total annual impact on Nebraska of $237.0 million in output (business sales), including $127.2 million in labor income. This labor income is spread over an estimated 1,461 full-year equivalent jobs.

Table 4.7: Total Annual Economic Impact on Nebraska from Lake 80 Net New Visitors and Homeowners

| Type | Total Impact (Millions $) | Total Labor Income Impact (Millions $) | Total Employment |
|---|---|---|---|
| Net New Visits | $38.3M | $11.8M | 335 |
| New Housing Units | $198.7M | $115.4M | 1,126 |
| Total | $237.0M | $127.2M | 1,461 |

Source: UNL-BBR calculations

It is important to note that it will take a number of years for this full annual impact to develop. Even after Lake 80 is completed and opened, new residential and commercial developments will be put in place steadily over time and may take a decade or more to be fully implemented. It also may take a similar amount of time for boaters and other lake users to change their consumption patterns to utilize Lake 80 at the same rates they use Lake Okoboji, Clear Lake or Saylorville Lake.

Finally, note that the impacts in Table 4.7 reflect the new employment, wages and economic activity that would be brought to, or retained in, Nebraska due to new visits to and housing units located at the Lake 80 site. However, it is important to remember that there are other potential economic impacts that are more difficult to measure, and therefore, could not be included in the impact estimates provided above. In particular, the development of Lake would create a major new recreation amenity for Nebraska that should help the state in its competition for residents and workers. This competitive advantage could produce additional economic growth for the state beyond what is listed in Table 4.7.

5: Financing Issues

Financing the construction of Lake 80 and an adjacent development would rely on funding from multiple sources. Some funding sources would be traditional. For example, construction of buildings in the residential and commercial development adjacent to Lake 80 could be funded by private developers and infrastructure development could be funded through a Sanitary Improvement District (SID). The financial feasibility of a Sanitary Improvement District is a separate analysis and will not be discussed in this report. Park development in Nebraska could potentially be funded through private donations.

The more novel financing issue for the Lake 80 project is how to finance construction of Lake 80 itself. This section examines approaches for funding lake construction and associated costs such as land acquisition and permitting.

One approach to funding land acquisition and lake construction is for a developer to purchase the land, build the lake, and then repay the investment and pay a return on capital by selling lots in the new development. However, this approach would be challenging in the case of Lake 80 due to the need to acquire a significant area of land and the high cost and time length of construction. Further, a complex land acquisition environment could allow current landowners to capture an outsized share of the rising land value, making financing even more challenging for the lake developer. An alternative could involve a non-profit organization which develops that lake. That organization could charge a one-time fee on land near Lake 80, to capture the property value increase which would occur as the lake is built. These are just two potential strategies for land acquisition. Identifying a specific land acquisition strategy is beyond the scope of this report.

Regardless of the approach used, it is necessary to understand how much of a property value premium would be created by building a recreation lake such as Lake 80. To evaluate the premium, this report relies again on analysis by HDR, Inc. As part of its 2022 report, HDR developed a building “yield” analysis that estimated the number and types of buildings that would occupy a residential and commercial development near Lake 80.

In its yield analysis, HDR Inc. envisioned construction of single-family homes or missing middle buildings on lots of various sizes as well as apartments and other commercial buildings. The scenario envisioned by HDR called for approximately 10,000 housing units in the adjacent development as well as approximately 1,900 hotel rooms, 350,000 square feet of commercial space, approximately 285,500 square feet of mixed-use space, 1.27 million square feet of office space as well as other relevant spaces such as parking and schools.

In the current analysis, this information on the number and types of buildings is combined with data on the land values for lots adjacent to Lake Okoboji and Clear Lake (see Table 2.10). The combined data is used to estimate the overall land value premium for a residential and commercial development adjacent to Lake 80. This land value premium is not the total value of land in the development, but rather the additional value of land that is located adjacent to a recreation lake.

Note that the value of buildings in the development (single-family homes, apartments and other commercial buildings) likely would not be available to support lake construction. Taxes and fees on buildings would be needed to support infrastructure development (through a SID) or pay for local public services.

The HDR yield analysis envisioned approximately 150 single-family homes on lots on the lakeshore (or on a road running along the lakeshore). These lots were valued at the average value of lakeshore lots at Lake Okoboji and Clear Lake (see Table 2.12). The yield analysis also included over a dozen apartment buildings and multi-use buildings (with apartments on the upper floors) on the lakeshore. The value of land for these buildings was estimated based on a multiple of the value for land housing a lakeshore townhouse.[12] HDR Inc. also envisioned canal houses adjacent to Lake 80. The potential value of these lots was estimated based on land values for canal properties surrounding Lake Okoboji.

The premium value of land further from the lakeshore was estimated based on the distance of each building from the lake and the average value of lots at that distance from Lake Okoboji and Clear Lake (see Table 2.12). Analysis focused on the land premium for each lot, which is the value of the lot less the average value for lots of $56,000 measured by the National Association of Homebuilders.

Using this approach, the total land value premium for the residential and commercial development planned for Lake 80 would be approximately $520 million. This premium would be a potential resource to help pay for Lake 80 construction, although, it may be challenging to set up a mechanism to collect this premium. Further, the premium is less than the anticipated $1.6 billion cost for lake construction.

However, there may be other potential sources of tax base to help finance the construction of Lake 80. In particular, the sales of retailers and many service providers in the Lake 80 development would be subject to sales tax. This sales tax base is not part of the planned funding for neighborhood infrastructure and is therefore a potential source of funding to support the construction of Lake 80. The magnitude of this sales tax base would be meaningful. To begin with, analysis in Section 2 identified $95.7 million in annual direct sales during expected visits to Lake 80. Most of this spending would be subject to sales tax except for gasoline purchases, suggesting that $78.3 million would be subject to sales tax. There also would be substantial spending by homeowners living in the commercial and residential development adjacent to Lake 80. The estimated annual household income of such residents is estimated to be approximately $862 million. The ratio of taxable taxes sales to income in Nebraska is approximately 35 percent and the average sales tax capture rate in Sarpy and Saunders Counties is 0.7 (Mai and Thompson, 2023), implying that the annual household income of residents in the development would generate $211.1 million of taxable sales each year.

[12] The estimate was based on the relative width of a lot for the typical apartment/multi-use building and the anticipated width of a townhouse lot.

Combining the estimated taxable sales from visitors and new homeowners, there would be $289.4 million in annual taxable sales.[13] Local sales tax revenue would be generated from this tax base, but these local revenues would be needed to fund local government services, and therefore, would be a poor potential source for financing lake construction. The state sales tax revenue is another potential source of financing. At a 5.5% state sales tax rate, $211.1 million in annual taxable sales would yield $11.8 million in state sales tax revenue. The State of Nebraska needs state tax revenue to fund its own public programs, but the state also has chosen in select cases to "turnback" a portion of state sales tax revenue in special districts to help finance capital projects.

For example, under the Sports Arena Financing Assistance Act, communities are able to divert up to 70 percent of state sales tax generated in a designated jurisdiction to pay for capital costs of developing the facility. Legislation could be developed to allow a similar turnback to help finance constructions costs for a recreation lake, which would be a venue for boating, fishing and other aquatic sports and recreation. If developed, such a taxing authority could raise $8.1 million in tax revenue each year to help finance lake construction finance based on 70% of the estimated $211.1 million in taxable sales.

Another example is Nebraska's Good Life Transformational Projects Act. The Good Life District program supports "unique Nebraska projects" that would "further grow and strengthen Nebraska's retail, entertainment and tourism industry" by allocating 50 percent of state sales tax revenue to support development of a district. Lake 80 and an adjacent development could meet the spirit of these goals. Further, as earlier analysis has shown, a significant share of visits to Lake 80 would come from outside of the state, including hundreds of thousands of new visits. This said, the Good Life Transformational Projects Act was not tailored to projects such as lake construction and in any case Lake 80 may not meet the criteria for a qualifying project in a county with more than 100,000 persons (at least 600,000 per year with 20% of sales in the District to persons who **reside** out of state). If changes were made in future Legislation so Lake

[13] The estimate is somewhat larger than estimates produced via alternative methods. First, an estimate of annual taxable sales is developed based on a projection of taxable sales in the Lake 80 development following land use projections envisioned by HDR, Inc. (2022). The estimate was based on the total square footage of commercial space, non-residential mixed-use space and the number of hotel rooms envisioned by HDR, Inc. and using national average data on sales per square foot for commercial space and occupancy-adjusted daily revenue per hotel room. This method produced an estimate of approximately $200 million in annual taxable sales in the development, but the method also would miss taxable sales collected from industries besides retail, hospitality and personal services (for example, sales tax collected on utilities). A second estimate was based on average taxable sales per housing unit. That method yields an estimated $230 million in taxable sales per year in the development adjacent to Lake 80 based on 2022 taxable sales per housing unit in Sarpy County, and 5,900 primary residence housing units in the Lake 80 development (the 9,972 housing units envisioned by HDR, Inc. (2022) less the 4,066 "additional" housing units used by non-residents (Table 2.9)). Sales tax data was from the Nebraska Department of Revenue. This method, however, would not capture taxable purchases by visitors.

80 construction qualified for such a program, $5.8 million in tax revenue could be raised each year to support lake construction based on 50% of the estimated $211.1 million in taxable sales.

The scenarios above envision reallocating $5.8 to $8.1 million per year in state sales tax revenue to finance construction of Lake 80. This amount of annual revenue could be sufficient to support borrowing of $75 to $100 million to support lake construction.[14]

Overall, combining the potential revenue from the land value premium and the "turnback" of state sales tax would not be sufficient to meet current cost estimates for building Lake 80 ($1.6 billion). This suggests a need to identify other potential funding sources. One possibility would be donations to support lake construction. The significant user benefits generated by the Lake 80 project, discussed in Section 3 of this report, highlight that there is potential for donations, if lake users are willing to share some of those benefits. This is a common practice. For example, performing and visual arts organizations often charge users to attend performances or visit a museum but many users also make an annual or periodic donation (sometimes called a membership) to support those organizations. Arts organizations also receive large dollar donations. Users and patrons of the arts are sharing some of the user benefits they receive from attending arts events and performances. These donations also support new or renovated venues for arts performances rather than operating costs. Could donations from future lake users help support the construction of a lake venue?

In theory, donations could be a source of revenue but there would be challenges. Individuals are not required to share their user benefits, and many may be reluctant to do so. There is an established history of raising money to help finance arts venues but little such history for financing recreation lakes.

To sum up, given current information about lake construction costs, and the anticipated "yield" of residential and commercial building along the shores of Lake 80, the resulting development may not have sufficient capacity to finance lake construction. This issue should be monitored further as estimates of construction costs and plans for commercial and residential development are updated.

[14] It is also worth noting that most of this revenue would be effectively reallocated from the general fund. As noted in Table 3.2, only about 25 percent of homeowners and visitor spending in the Lake 80 development would be new to the state. Therefore, $4.4 to $6.1 million in annual state tax revenue would be lost general revenue for Nebraska as it would have been generated in the state with or without the Lake 80 development. This is not a unique phenomenon for the Lake 80 project. This phenomenon typically occurs with such tax turnback districts, which are effectively funded in large part with general state tax revenue.

## 6. Summary

The proposed Lake 80 would be an impactful project for Nebraska. The project would create substantial tourism and construction activity and significant user benefits. The project also would be costly. This study by the UNL Bureau of Business Research examined the projects costs, impacts and benefits.

Construction of Lake 80 and commercial services adjacent to the lake would attract an estimated 1.4 million annual visits to the area. The majority of these visits would be from Omaha, Lincoln and other nearby areas of Nebraska. Lake 80 would therefore represent an important amenity for Nebraska. Economic analysis was used to estimate the annual dollar value that individuals would place on the recreation and scenic opportunities provided by the lake. The present value of these annual benefits is estimated to be $1.21 billion.

A commercial and residential development adjacent to Lake 80 would be expected to capture 7,200 new housing units due to recreation opportunities. The development also would attract additional housing units given ongoing suburban growth in the surrounding area.

Lake 80 would yield large annual visitor impacts for Nebraska. It is projected that the lake would attract hundreds of thousands of visitors each year from neighboring states. The lake also would retain in-Nebraskans who currently visit recreation lakes in other states. The economic impact of new visits is estimated at $237 million per year. Construction of Lake 80 and an adjacent commercial and residential development also would generate impacts over the coming decade. Required construction would be expected to yield a $1.3 billion economic impact during the construction period. This level of impact is associated with approximately 7,400 job-years of employment in Nebraska.

Private developers could take the lead in developing commercial and residential properties adjacent to the lake. A Sanitary Improvement District (SID) could be used to finance the required infrastructure. Financing construction of Lake 80 would be challenging, but the project also would generate a tax base to help finance construction including a premium on residential properties built adjacent to the lake. Donations also could support portions of project development. More generally, financial feasibility should be evaluated further as plans for lake construction and adjacent property development are refined.

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## Appendix 1. Background on the Bureau of Business Research and Principal Investigators

### A. About the Bureau of Business Research

**The Bureau of Business Research** is a leading source for analysis and information on the Nebraska economy. The Bureau conducts both contract and sponsored research on the economy of Nebraska and its communities including: 1) economic and fiscal impact analysis; 2) models of the structure and comparative advantage of the current economy; 3) economic, fiscal, and demographic outlooks, and 4) assessments of how economic policy affects industry, labor markets, infrastructure, and the standard of living. The Bureau also competes for research funding from federal government agencies and private foundations from around the nation and contributes to the academic mission of the University of Nebraska-Lincoln through scholarly publication and the education of students.

### B. Investigators

**Dr. Eric Thompson (Principal Investigator)** is the Director of the Bureau of Business Research and a Professor of Economics at the University of Nebraska-Lincoln. Dr. Thompson has conducted a broad group of economic impact studies, demographic projections, and analyses of economic development programs for Nebraska and cities in Nebraska. Thompson's research has received support from the United States Department of Labor, the Robert Wood Johnson Foundation, the Center for Economic Analysis, the Nebraska Health and Human Services System, the Lincoln Partnership for Economic Development, the Lincoln Chamber of Commerce, the Greater Omaha Chamber, and the Nebraska Department of Economic Development. In his previous employment, Dr. Thompson served as the Director of the Center for Business and Economic Research and a Research Associate Professor of Economics at the University of Kentucky. Dr. Thompson received his Ph.D. in agricultural economics from the University of Wisconsin-Madison in 1992. His research fields include regional economics, economic forecasting, and state and local economic development. His research has been published in *Regional Science and Urban Economics*, the *Journal of Regional Science*, the *American Journal of Agricultural Economics*, and the *Journal of Cultural Economics*.

**Dr. Mitchel Herian (Co-Principal Investigator)** serves as Project Director at the Bureau of Business Research. Dr. Herian also serves as an adjunct professor in the Political Science department at UNL. Dr. Herian has conducted applied research for agencies such as the U.S. Army, the National Aeronautics and Space Administration (NASA), the Nebraska Supreme Court, the Nebraska Department of Education, and the Kansas Department of Corrections. His research has received support from agencies including the National Science Foundation and the National Institute of Justice. Dr. Herian's research has been published in a variety of peer reviewed journals including the Journal of Public Administration Research and Theory, American Review of Public Administration, Policy Studies Journal, State and Local Government Review, and Ecology & Society.

**Dr. Uchechukwu Jarrett (Co-Principal Investigator)** is an Associate Professor of Practice at the University of Nebraska Lincoln. His research, which is empirical in nature and focuses of

causal estimation, covers the study of factors that impact growth and development with a focus on three aspects: international economics, energy economics (with a concentration on resource curse) and climate change. He is a faculty fellow of the Yeutter Institute of International Trade and Finance and a Seacrest Teaching fellow at UNL, and he teaches in the areas of International economics, development, and statistics.